This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

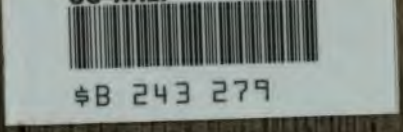
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

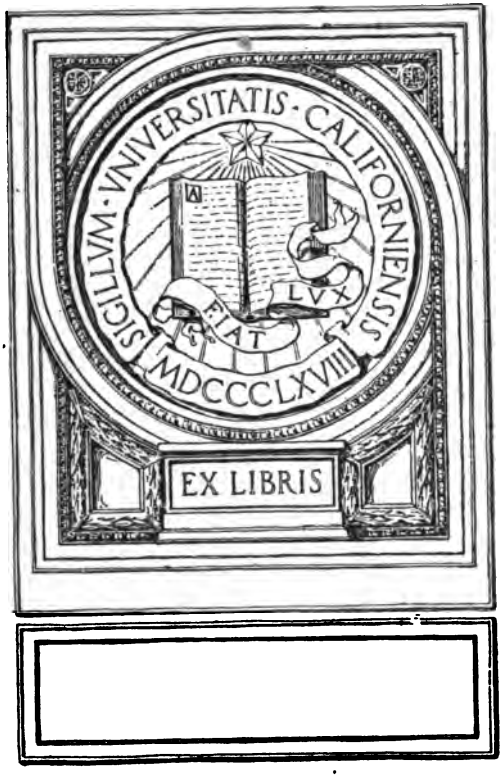
Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`


$B 243 279

CANDY-MAKING REVOLUTIONIZED

CONFECTIONERY FROM VEGETABLES

MARY · ELIZABETH · HALL

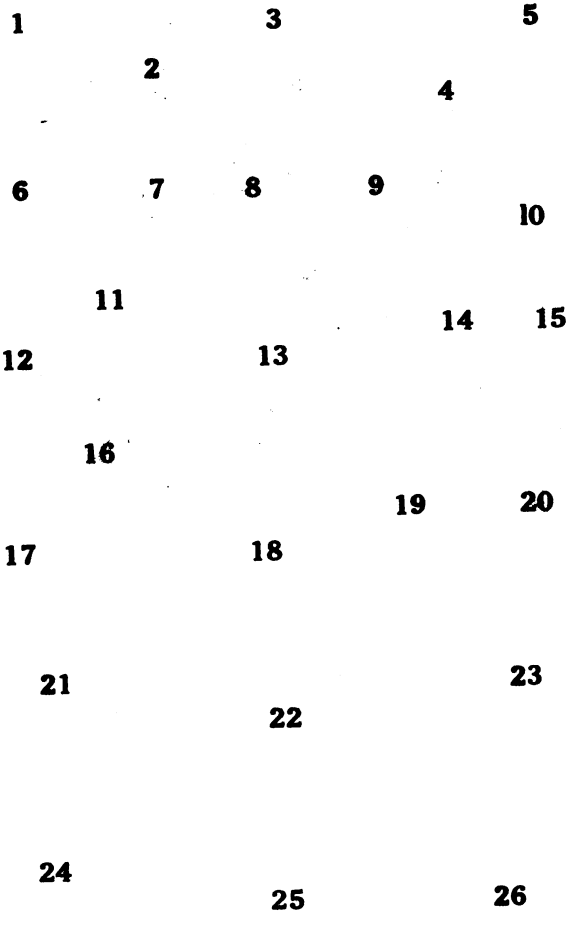

SIGILLVM · VNIVERSITATIS · CALIFORNIENSIS
LVX
FIAT
MDCCCLXVIII
EX LIBRIS

CANDY MAKING REVOLUTIONIZED

CANDY-MAKING REVOLUTIONIZED

CONFECTIONERY IN
VEGETABLES

See description on page XI



See discription on page XI

CANDY-MAKING REVOLUTIONIZED

CONFECTIONERY FROM VEGETABLES

BY

MARY ELIZABETH HALL

ILLUSTRATED

New York

STURGIS & WALTON COMPANY

1914

All rights reserved

TX791
H2

COPYRIGHT, 1912, BY
PERRY MASON COMPANY

COPYRIGHT, 1912, BY
STURGIS & WALTON COMPANY

Set up and Electrotyped. Published, December, 1912

Reprinted March, 1914

TO

ONE ELIZABETH,

AND ALL ELIZABETHS WHO LOVE PURE

CANDY AND ITS MAKING

335791

CONTENTS

CHAPTER		PAGE
	INTRODUCTION	i
	PREFACE	vi
	SECTION I	
I	FOR THE NOVICE	3
II	FOR THE CANDY-MAKER'S TABLE	8
III	THERMOMETER	19
IV	USE OF STEAM	24
V	CRYSTALLIZATION	27
VI	CHOCOLATE COATING	33
VII	SUGAR	41
	SECTION II	
VIII	DECORATIVE CANDIES	
	I From Potato Paste	52
	Green Leaves	56
	II Violets	
	Pop-corn Violets	57
	Cocoanut Violets	58
	Violet Boutonniere	59
	III From Potato Fondant	
	Uncooked Fondant	61
	Cooked Potato Fondant	62
	Modeled Candy	62
	Coloring	64
	White Daisy	66
	Yellow Daisy	69
	Calla Lily	69
	Red Apples	70

CONTENTS

CHAPTER		PAGE
	Single Roses	72
	Rose Buds	74
	New Potato	75
	Pea-Pod	76
	Snow Ball	76
	Grapes	79
	Other Possibilities	79
IX	POTATO CARAMEL	
	Potato Caramel No. 1	81
	Potato Caramel No. 2	82
	Potato Caramel No. 3	82
	Opera Caramel	83
X	POTATO—MISCELLANEOUS	
	Mocha Walnuts	84
	Pecan Creams	85
	Raisin Creams	85
	Peppermint Chocolates	86
	Celtic Almonds	86
	Chocolate Bars	87
	Vegetable Cream	88
XI	SWEET POTATO	
	Sweet Potato Patties	90
	Sweet Potato Knots	91
	Sweet Potato Pastilles	93
XII	PARSNIP	
	Candied Parsnips	93
	Parsnip Boutonniere	95
XIII	CARROT	
	Carrot Rings	97
	Crystallized Carrot	98
	Carrot Roll	98

CONTENTS

CHAPTER		PAGE
	"Gingers"	99
	Garden "Ginger"	99
	Variations	101
XIV	BEAN	
	Candied Green Beans	102
	Bean Taffy	103
	Nut Bean Taffy	104
XV	BEET	
	Frosted Beet Slice	105
	Beet Puffs	106
	Beet Cubes with Variations	107
	Crystallized Beets	108
	Spiced Beets	109
	Spiced Beet Bon-bons	109
XVI	TOMATO	
	Tomato Marshmallow	110
	Chocolate Marshmallow	112
	Vegetable Nougatine	112
	Chocolate Nougatine	114
	Nut Bur	114
XVII	CORNLET	
	Nut Cornlettes	118
XVIII	ONION COLD TABLETS	120
XIX	ORIENTAL PASTE	123
	Seaweed	124
XX	STUFFED FRUITS	
	Dates for Candy	128
	Sparkling Dates	128
	Chocolate Covered Dates	129
	Date Brilliants	129

CONTENTS

CHAPTER		PAGE
	Rhubarb Marmalade . . .	129
	Sugared Dates	130
	Stuffed Dates	130
	Stuffed Prunes	130
XXI	ANGELIQUE	
	Rings	132
	Orange Rings	133
	Angelique as a Plant . . .	133
	Preserved Green Angelique	135
	Dried Angelique	135
XXII	FOR THE CATERER	136
XXIII	FOR THE TEACHER	142

ILLUSTRATIONS

VEGETABLE CANDIES . . . . . *Frontispiece*

OPPOSITE PAGE

FASCINATING TO THE CHILD 72

BOXED VEGETABLE CANDIES 98

DECORATIVE AND EDIBLE 118

ANGELICA ARCHANGELICA 132

FOR THE CATERER 138

INTRODUCTION

When Mary Elizabeth Hall first brought her discovery to my attention, I thought that it was indeed one that would revolutionize candy-making, both that of the amateur at home and of the manufacturer. And, in the months that have followed, to this belief has been added the conviction that this revolution is one very much worth while. Why so simple and obvious a discovery was not made long ago is a mystery to me; perhaps its very simplicity and obviousness is proof of its importance.

Of cookery, candy-making is a branch which is entitled to more dignity than it ordinarily receives. Negatively and positively, the importance of sweets to the child can hardly be over-estimated. If he consumes a quantity of impure confectionery, his digestion will be ruined for life; how much of the confectionery bought is rankly impure it is well for the mother's peace of mind that she does not know! On the other hand, if the child is not given

sweets, he is deprived of a food element of the greatest value to his development. And for the adult, the value of pure candy is too obvious to warrant comment.

Vegetable candy, to my mind, is ideal confectionery. Of its purity, there can be no doubt. Moreover, it furnishes the valuable element of sugar so combined with nutritious vegetable bases that, because of the bulk, there is no temptation to overeat. This quality of the new confection would seem insurance against the evil effects of gluttony! Before an undue amount of sugar is consumed, the very mass of the vegetable base has satisfied the appetite.

Many sorts of vegetable candy have unusual keeping qualities; indeed, some kinds will retain their flavor and moisture for as long as a year. It is significant to note that almost all non-vegetable confections that can be successfully stored for any length of time contain artificial preservatives; vegetable candy, however, keeps, not because of the addition of alcohol or even benzoate of soda, but because of the excellence of the processes themselves.

Notwithstanding its advantages, vegeta-

ble candy is no harder to make than is any other good candy. For success in any sort of cookery, much hard work is necessary; slipshod methods and intuition can not produce food that is up to standard. Of even greater force is this rule when applied to the most delicate brand of cookery — the making of confectionery. Miss Hall has supplemented her major discovery by several other valuable discoveries — or "adaptations," as she modestly styles them. Her use of crystallization, for instance, enables the amateur confectioner to secure results which were previously out of her reach.

Aside from its virtues from the hygienic, dietetic and practical points of view, the new confectionery has much to commend it. By utilizing the common and cheap vegetables of the home garden, it gives to the girls and women on the farm and in the village an opportunity that previously was not theirs. This discovery means that they can now make the finer sorts of candy, the fashioning of which was formerly out of the question to women who did not have at their command the resources of the spe-

cialty stores of the large city — and plenty of money to spend in them. This enlargement of the culinary horizon of these countless women is not without broad significance; the removal of their limitations — petty and otherwise, if you will — is necessary before we shall cease to tremble because they who belong on the farm and in the village refuse to stay there. Once banish the discontent of the farm woman, and there is no rural problem of consequence. And vegetable candy-making is not without sociological importance because it is a step — though, perhaps, a very short one, comparatively! — in that direction.

More definite, however, is another field for speculation in connection with vegetable candy. It offers to the housewife, housedaughter, and to the teacher a new modeling medium. That from a cheap and easily made base attractive objects may be made — and then eaten — surely is a recommendation of no slight moment. Miss Hall's discovery has placed within easy reach of persons of moderate means and skill a medium through which really beautiful objects can be made in candy. For the first

time, the amateur candy-maker can prove for herself that candy-making is not only an art, but that it is one of the fine arts.

WARREN DUNHAM FOSTER.

PREFACE

The years of work in candy-making that have made possible this book, I now look back upon with a certain feeling of satisfaction. The satisfaction comes from the knowledge that because of the discovery that is here recorded, the candy of the future will be purer, more wholesome, more nourishing than that of the past has been. Even if the processes that are here set forth fail of the widest adoption, I have still the satisfaction of knowing that just so far as they are adopted will there be greater healthfulness of confectionery.

Another reason for the satisfaction that I feel is my knowledge that my discovery has opened to the home candy-maker a whole new world. Previously many of the better sorts of confectionery — particularly of the decorative kinds — were out of her range, either because of the cost of the necessary ingredients or the difficulty of their purchase or handling; particularly under a heavy disadvantage has been the vil-

lage or country cook who has not had the service rendered by the specialty stores of the great cities. Now, however, with the ever present potato substituted for marzipan — hard to obtain at more a pound than potatoes cost a peck! — it is the girl or woman with her own garden who has the advantage. Moreover, decorative candies that formerly required more skill than most amateur confectioners possess can now be made by anyone who can model clay or use a cooky cutter. Mothers who formerly were all too often required to gratify their children's longing for candies that told a story — candies modeled or otherwise decorative — by giving them boughten confectionery that contained plaster of Paris, aniline dyes and other ingredients equally harmful, can now in their own kitchen from nourishing and harmless vegetables fashion sweets that are just as beguiling to childish eyes.

Nor is this all. Children invariably have a craving for sweets that if allowed to run its course is almost sure to lead to indigestion and worse. On the other hand, if this craving is not satisfied, the children will be

deprived of a food of the utmost value — a food element, indeed, that it is indispensable. Vegetable candy offers an ideal solution of this difficulty. Sugar it of course contains, but the vegetable base supplies no small part of the bulk; consequently children may eat their fill of it and satisfy their natural longing for candy without having gorged themselves with sugar. Moreover, the vegetable base has virtues that are positive as well as negative; it itself supplies valuable food elements and equally valuable vegetable salts.

Many colors and flavors are made available by this discovery. The use of beets, for instance, has added to the candy-maker's palette a very attractive new shade. Each vegetable contributes at least one new flavor. Novel as are candies made from vegetables, they must not be thought faddish. Caramels, marshmellows and bonbons and all the rest are here; tastes that have already won favor are here, and many new ones as well.

In places, perhaps, the directions that follow may seem over detailed. Invariably, however, I have tried to give information

about all the points that would come to the mind of the amateur confectioner. I have tried to tell the *why* as well as the *what*. Moreover, the processes at times may seem, perhaps, a bit over long. It should be noted, however, that vegetable candy-making is no more complicated, if as much so, as is the making of any other confectionery. Good candy invariably means effort, and intelligent painstaking effort at that.

It has been with the home candy-maker in mind that I have written this book. Undoubtedly, however, the discovery will appeal to the professional. I am glad, for the more vegetable candy is made, the less unhealthful confectionery there will be consumed. For the same reason, I hope, too, that women and girls seeking to make profitable their idle hours at home, may embark in a small way in the manufacture and sale of vegetable candy.

My thanks are due to *The Youth's Companion* for its kind permission to reprint material that first appeared on its Girls' Page — a department that, together with Family Page and Boys' Page, has done

much for better living throughout the nation.

No doubt I have been garrulous concerning my own discovery, but I trust that the privilege of garrulity will be granted to the woman who has been a pioneer and who, after suffering the hardships that are always the lot of the pioneer, has, as she believes, opened up a whole new world in candy-making and a very good world at that!

M. E. H.

BOSTON, MASS.,
June 12, 1912.

KEY TO FRONTISPIECE

1 Green Leaf
2 Violet
3 Wild-Rose With Angelique Leaf
4 Red Star From Potato Paste
5 Jellies—made from green peas
6 Carrot Ring
7 Celtic Almond
8 Mocha Walnut
9 Pastille Of Sweet Potato
10 Frosted Beet Slice
11 Carrot Ring
12 Beet Leaves
13 Daisy—attached to macaroon with a crystal
14 Pecan Cream
15 Angelique Ring
16 Raisin Cream
17 Heart From Potato Paste
18 Sweet Potato Knot
19 Triple Filled Orange Rings
20 Beet Puff
21 Nut Bur
22 Pea-Pod
23 Cocoanut Beet Square
24 Red Apple
25 Yellow Rose—on small round cake
26 Snow Ball

CANDY MAKING REVOLUTIONIZED

UNIV. OF CALIFORNIA

SECTION ONE

I

HELP FOR THE NOVICE

Almost all of the difficulties of the novice in the art of candy-making come from lack of practice. Although it is a difficult branch of cookery, experience in its intricacies will overcome many of the handicaps under which the beginner struggles. It should be carefully noted that these handicaps apply fully as much to the old-fashioned sort of candy-making as to the new. The fundamental processes are often the same. If the beginner in candy-making knows and will follow a few simple rules, the measure of success that greets her efforts will be largely increased.

Be accurate. If the rule calls for one-quarter teaspoonful of a flavoring extract, measure that amount by a measuring-spoon; do not take up any spoon that happens to be convenient, and pour in what seems to be about the right quantity. More and more cooks are working by rule and not by in-

tuition; but in candy-making the caution against inaccuracy is especially necessary, for the processes are delicate, and subtleties of flavor and of texture are more evident than in more substantial food.

The weather is of more moment in candy-making than in plain cooking. Do not try to make candy on a muggy day; the results probably will be unsatisfactory. But if forced to disregard this warning, attempt but little, act quickly, and remember that damp weather is the only excuse for the substitution of intuition for rule. Just why humidity and low barometric pressure play havoc with the work of the confectioner need not be discussed here.

In making confectionery, cleanliness to the point of chemical purity is highly desirable. Many successful cooks believe that candy should be made in a pan that has never been used for anything else. That belief, perhaps, may be extreme, but the fact remains that one cannot be too careful in regard to the cleanliness of her utensils. And this necessity for cleanliness holds for any receptacle in which any ingredient is placed. Note particularly that

heating lard will leave a taint which will spoil the delicacy of flavor of candy made in the same dish.

Very often it is desirable that liquids remain hot after the actual cooking has been done. The ordinary stove gives too much heat for the purpose, and the confectioner's "working slab"—a device moderately heated by steam—is expensive. A cheap and effective substitute, however, is a humble soapstone. Use marbled cloth instead of waxed paper to dry candy upon. Then there will be no danger that little particles of the paper adhere to the candy. Candied fruit and similar confections, however, should be drained on nickeled wire netting as explained in another chapter. Place the netting over a dish, and pour upon it the whole mass of fruit and syrup. By pouring all of it at once, the coating of syrup will be uniform: It will dry evenly, as the air will reach all sides alike. After most of the moisture has evaporated, the fruit will be ready to be rolled in sugar.

Sprinkle a shallow dish with coarse sugar. Roll each piece of fruit in a separate place in the dish, taking care that

the sugar is absolutely dry when the fruit is placed in it. If the sugar is damp, it will mat so that the confection is "mussy" to the eye and unpleasant to the palate. Moreover, the scales of damp sugar will jar off, leaving a break in the complete covering which is necessary for the preservation of the fruit. One rotting piece will contaminate another, until the whole boxful is unfit for use. If the sugar is properly applied, candied fruit, well packed, will keep for several weeks without injury.

Pack soft candies in layers separated by waxed papers backed by cardboard. Remember that the best-made confections will be unappetizing when presented or served unattractively.

In pulling taffies or other candies, corn starch may be put to good use. No definite rules can be given, because the temperature and the humidity of each pair of hands — to put the case euphemistically — are different. Each time the material is pulled, the candy-maker should dust her hands as lightly as possible with the cornstarch. A moderate amount of it worked into the mass will do no harm, but care

must be taken not to use so much that the candy becomes starchy. Moreover, a heavy coating of the starch does not protect the hands any more than does a light dusting.

While the candy is being pulled, it should be handled as little as possible. Let the candy's own weight over the hook do the real work. To avoid "bunchiness," the confectioner must keep the mass moving in uniform thickness — a difficult task, success in which comes only from practice.

II

FOR THE CANDY-MAKER'S TABLE

For real success in candy-making the amateur needs a few small utensils similar to those that have long been used by confectioners. The advice which follows can be as well applied to old-fashioned candy making as to the new sort.

A copper bonbon dipper, really nothing more than wire twisted so as to outline a spoon, will be found convenient for any sort of dipping likely to be attempted in the home kitchen. The wire dipper is a much more satisfactory tool than a silver fork, the implement usually recommended for this purpose.

Get fourteen inches of copper wire — preferably number eighteen — heavy enough to bear a few ounces of weight without bending, but soft enough to be shaped easily by the fingers. A quarter-pound spool should not cost over ten cents. Grasp the wire five inches from one end and bend

it double at that point. The double strand — which makes the handle — will then be five inches long, and the single four. Out of this single strand, beginning half an inch from the end of the doubled strand, form a loop three-quarters of an inch long. Twisting the wire round the forefinger or a small empty spool will make the loop. Wind the two inches of wire left free about the two parallel strands, carrying it up as far as it will reach.

This skeleton spoon is excellent for dipping bonbons, fruits or nuts. To hold objects of different sizes, the soft copper wire may be bent easily; and in this respect the home-made dippers are better than the nickeled ones on the market. For dipping creams into chocolate, this dipper is probably the best device which is available for the amateur.

Another help is the so-called rubber mat, useful for modeling wafers and centers. This is nothing more than a sheet of heavy rubber fabric, stamped so that molds are formed. Before using, place the mat in cold water, dry, and then pour the fondant into the depressions until they are entirely filled.

When the fondant is dry enough to hold its form, the mat is turned upside down, and the wafers and centers easily freed. After

Rubber Mat.
Fig. 1

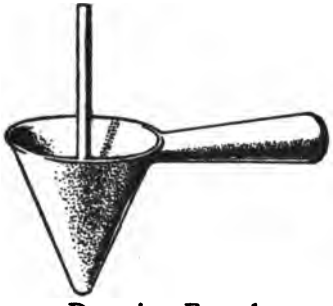
being washed in cold water and carefully dried, the mat is ready for use again.

The advantage of the mat is that all the candies are of the same size and regular in shape, and that no material is wasted. For the girl who intends to get only one mat, the kind with round molds —" truncated cones," to be accurate — is the best to buy, because it may be used equally well for centers or wafers. See Fig. 1 above.

The candy-maker who is prepared to spend more for her equipment may well buy several mats, each with molds of different shapes. Then she should reserve one shape for each flavoring or mixture, so that she can easily distinguish by sight different

kinds of creams after they are made. The mats are sold by weight, generally at the rate of a dollar and a half a pound. The one shown in Fig. 1 weighs eighteen ounces.

Either to fill molds or to drop masses upon slabs or waxed paper in the old way,



Dropping Funnel.

Fig. 2

the candy-maker will find a dropping funnel useful. This is a small tin cornucopia with a long handle. Whittle a clean stick so that one end of it will fit into the outlet of the funnel, and plug the hole from above. Fill the funnel with the mass to be dropped, and then raise the stick just long enough to allow enough of the mass to run out to fill the mold — or if the old plan is followed, to

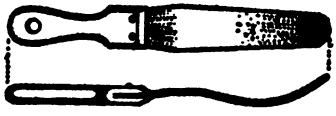
form a wafer or cream of proper size. See Fig. 2, on the preceding page.

Intelligent operation of the funnel makes the work more rapid and accurate, and the mass holds its heat longer, and is kept better mixed than if poured or spooned from a dish. Funnels especially made for this purpose cost from twenty-five cents to one dollar; but any tinsmith can easily make one out of an eight-inch piece of heavy tin, shaped so as to form a cornucopia, with the smaller opening not more than three-eighths of an inch in diameter, and attached to a handle at least twelve inches long.

For heating mixtures, white enamel dishes are preferable to tin or aluminum. For mixing, wooden spoons are better than metal ones, because the mass which is being stirred does not stick so readily. Wooden paddles are often better yet, for their flat surfaces do not retain masses so tenaciously.

Perhaps the most useful tool of all is a nameless instrument which does duty for both knife and spoon, and in addition has virtues all its own. It is particularly valuable for reaching the corners of pans. This

tool is not on the general market, but can be made by most metal-workers — either tinsmiths or blacksmiths. A piece of spring steel, about ten inches long, rounded at the end, and curved as shown in Fig. 3, is



Special Knife
Fig. 3

riveted into a wooden handle. Heavy tin may be substituted for the steel, if desired.

A molasses-candy or taffy pull without a hook may be good fun, but it is hard on the candy as well as on the hands. A blacksmith can easily make the hook of round iron, about a half-inch in diameter and eighteen or twenty inches long. The rod should be bent until it forms roughly a letter J, with the tip about seven inches from the horizontal line. The top — the upper part of the horizontal line of the J — should be pounded flat, and two holes bored for screws.

Be sure to attach the hook to the wall

firmly, and about level with the shoulders. Hooks may be purchased for about fifty cents apiece, but those made by the blacksmith will do as well. Even with the hook, it is well to wear canvas gloves, so that the mass can be handled hotter, and in a more hygienic fashion than with bare hands. Canvas gloves are easily laundered — something which cannot be said of the expensive buckskin gloves recommended for this purpose.

For use in "cutting in" fondant and other small masses it is well to buy a four inch wall paper knife — a tool which can be bought for from ten to twenty-five cents. Fondant should never be beaten, but instead it should be "cut in." This process is scraping up the whole mass, folding it over and cutting through with the knife. This motion is repeated, from each side of the pan, until the fondant becomes a ball which can be kneaded by the hand.

Procure smooth iron bars, two fifteen inches long and two eighteen inches long, all three-eighths of an inch thick and two inches wide. Any blacksmith shop can furnish them at slight expense, or they may be

purchased more cheaply from the confectioner's supply stores. The bars are to be placed—set on edge—in the form of a rectangle on a marble slab. Be sure that the bars are carefully smoothed, for otherwise they will be untidy and soon rust. By lapping the edges and moving the bars back and forth, a receptacle of any size desired can be made. After buttering slab and bars, pour the candy into the enclosure. When it has cooled, remove the bars, and with one sharp incision cut the candy clear across. Use a sharp knife of uniform thickness and width, preferably with a thin blade.

It is also convenient to have two bars six inches long. They are useful in dividing a batch when different flavors or colors are used. The partitions will be useful for dividing the filling from the outside layers when a three-storied candy is to be made.

The need for these bars comes from the fact that one should never cut candy in a pan. The attempt to do so will always result in pieces with crumbling edges, as the knife has to be dragged through the candy instead of cutting down sharply, and as the sides of the pan allow no room for the ex-

pansion which the width of the knife will cause. Moreover, there is always waste in the corners and at the sides.

The candy-maker should appreciate the palette knife. The flexibility of the blade is such that it can be put to many uses for which the ordinary knife is unfitted. For instance, with a palette knife it is possible to coax refractory substances from the corners and edges of pans. Because of this flexibility, it is particularly useful in lifting modeled forms from a flat surface, as is explained in Chapter VIII.

To the confectioner, one of the most useful tools is a modeling stick. This small tool is of great value to the candy-maker. It can be grasped easily and its shape allows of its use at many angles that would be inconvenient or impossible for a less adaptable tool. The roundness of the blunt end serves many purposes; the straighter side is particularily useful for smoothing off work, and the inside curves lend themselves to a great number of processes.

Wire screens, often known as "wire baking forms," are very useful for drying can-

dies that have been sugared or for draining confections that need to be exposed to the air. Those that are oblong in shape are much more convenient than the round ones. The wires forming the screens cross at distances of about one-sixteenth of an inch, making really a coarse sieve. The sides extend up about one-half inch. The screens make excellently ventilated trays, but for candies that come from an ordinary crystal the mesh is too fine to allow proper draining. Should the crystal be very thin, however, the screen can be used for draining, provided the pieces are well separated and placed only one layer deep.

Wire racks for the drying of candy are among the necessary equipment of the candy-maker. These may be had in varying degrees of fineness, the wires forming squares of from three-eighths to three-quarters of an inch. Squares of one-half inch and under give the best support for confections, however, and allow ample room for draining. If the candies are small or soft the large squares give insufficient support. The racks are without sides, the edges being formed either by a heavy wire or a metal

binding. The supports are made by wires bent down at the ends and at the center. These racks are the same as the " cake coolers " of ordinary cookery.

Another method of drying particularly useful for models and cream centers is a bed of corn starch. Do not use this plan with any confection the surface of which is wet from the application of pastes.

As the basis for this process buy two or three packages of a cheap grade of corn starch. The corn starch can be kept ready for use by occasionally drying it out and sifting it.

Spread the corn starch in a large shallow pan or tray thick enough to hold the weight of your candy. This gives a non-resisting surface which keeps the models in form and when dry the corn starch will easily brush off.

By all odds the most valuable tool for the confectioner, amateur or professional, is the candy thermometer. Its use is so important that the following chapter is devoted to a discussion of it.

III

THE CANDY THERMOMETER

For real success in candy-making, the home confectioner needs a candy thermometer. As is emphasized throughout the volume, accuracy is of the greatest importance in candy-making. Cooking must stop at just the right moment, or the candy is either harmed or actually spoiled. Until the last few years, for the amateur, the only tests to determine the completion of cooking have been known as "thread," "soft ball," "hard ball," "crack" and "hard crack." While the candy-maker has been struggling with these unsatisfactory tests, the candy has kept on cooking, perhaps until it has reached the next stage of temperature, changed texture, and so become unfit for the use for which it was intended.

The professional confectioner has long been able, by the use of a thermometer, to determine just how hot his candy was and

to remove it from the heat at exactly the right moment. His thermometer, however, was not only too expensive for the amateur, but also too long to be used except in a large vat. There are now on the market, however, thermometers that the amateur confectioner or small manufacturer can use to advantage. Even when hardware dealers do not keep the thermometers in stock, they can — and will — order them from their jobbers. The instruments, of which there are several makes, are about nine inches long, and sell for from one dollar to two dollars and fifty cents. Most of these instruments register from about eighty degrees to three hundred and eighty degrees Fahrenheit, although the range which interests candy-makers most is only from two hundred degrees to three hundred and twenty degrees. There are a few facts which the girl confectioner who uses a thermometer should keep in mind.

Buy a thermometer which is guaranteed by its maker. See that the markings are so well defined that they can be read easily. Before use, the thermometer must be regulated to conform to the local altitude.

Place the thermometer in a kettle of water, heat, and let it boil for ten minutes. If the mercury marks two hundred and twelve degrees, the thermometer is correct as it is, but if there is a variation of two degrees or more, allowance must be made. If water boils at two hundred and ten degrees, two degrees must be subtracted every time the thermometer is read. Then "soft ball" means two hundred and thirty-six degrees, not two hundred and thirty-eight degrees, as it would had the water boiled at the normal two hundred and twelve degrees, or two hundred and forty degrees, as it would had the water boiled at two hundred and fourteen degrees. Do not think that a variation of even two degrees is too slight to count; absolute accuracy is essential.

For safety in transit, manufacturers often pinch together the case of the instrument so that the scale-piece can not work loose and become broken. A very little tinkering with the copper jacket, however, will be sufficient to free the scale-piece. This must be done, not only so that the thermometer can be cleaned readily, but so that, when the mixture to be tested is shallow, the

dial can be pushed out in order that the bulb can be covered by the hot mass. Unless the bulb is covered, the thermometer will not register correctly.

Allow the thermometer to become hot gradually; do not thrust a cold instrument into boiling water. Do not remove the thermometer to read it, as it quickly changes. Read it with the eye on the level. Remember that mixtures which require stirring must be stirred below the thermometer as well as elsewhere. Be sure that the thermometer is clean. Each time after it has been used push the dial out of the copper case and wash both thoroughly. Do not neglect the back of the piece of metal to which the tube is attached. Be particularly careful after mixtures which contain milk or cream. This removable scale is a great convenience.

The amateur candy-maker will be glad to know that sugar and water will not burn until all the moisture is evaporated, and that does not happen until three hundred and fifty degrees is reached. If, however, she is making an unusually small quantity, and the thermometer begins to climb above three hundred degrees — beware! The

large quantity, however, will take care of itself because of the moisture it contains.

Below is a table which will enable one to interpret the old stages in terms of degrees. Fortunately most candy thermometers have this information stamped upon their dials.

310°—Hard Cracked	238°—Soft Ball
290°—Cracked	230°—Thread
254°—Hard Ball	

In the following pages it is assumed that the cook has a thermometer. If she has not, the degrees given may be translated into the old stages and the old tests used. Thus, if the directions read "cook to two hundred and thirty-eight degrees," the confectioner who has no thermometer will stop the cooking when a portion of the mass will "form a 'soft ball' in cold water." If the directions read two hundred and thirty-six degrees, the "soft ball" must be softer; if two hundred and forty degrees, the "soft ball" not so soft. Thus, without the thermometer, the thermometer readings form a scale which makes easier the application of the old tests. Be it noted that the thermometer is no more necessary in vegetable candy-making than in the traditional sort.

IV

THE USE OF STEAM IN CANDY-MAKING.

Steam may be used so that it will be of much help to amateur candy-makers, few of whom realize its possibilities. These possibilities, which range from actual cooking to the maintenance of the minimum of heat, may all be grouped under four processes.

First, to steam: Steaming is cooking by moist heat but not immersing the material in the water as in the boiling process. It should be followed to soften dried fruits or other ingredients, as often required by candy receipts. The best way is to place the materials upon a rack supported a couple of inches above the water in the cooking vessel, covering it tightly and placing it on the fire. The confined vapor will soon soften whatever is within the vessel.

Second, the double boiler: The double

boiler is of particular value when protective cooking is desired. This method will hold all juices present but neither adds moisture nor dries out existing moisture as happens when the mixture is over a direct blaze. In this way, the materials can be heated without burning. It is of particular value with materials that need heat but need no further moisture — simply the development of that moisture which they already have.

Third, a modification of the use of the double boiler by leaving off the cover: Thus the temperature is lowered and the actual cooking operation lengthened. Vapors that may arise from the cooking mass are allowed to escape instead of being absorbed.

Fourth, the steam bath: The steam bath is obtained by placing the receptacle containing the mass over a smaller vessel containing boiling water. In this way, the steam is applied only to the bottom of the receptacle and its intensity may be varied. The lowest possible heat may be applied; temperatures far below the boiling point, or even the cooking point, are made possible. The temperature of the upper dish is

regulated by the distance from the direct heat of vessel containing the water. Always start with boiling water so that the material treated will be affected only by the heat of the steam and not the direct heat which is bringing the water to the boiling point. This method is particularly valuable for keeping fondant and other masses moderately hot for dipping, or for melting chocolate or bon-bon creams, which should be melted at less than one hundred degrees.

V

CRYSTALLIZATION

One often wonders why the candy-eating public has the chocolate habit. The answer is simple. The manufacturer generally offers the public chocolates. To one not conversant with candy-making, it is not so easy, however, to explain why the candy-maker offers the chocolates largely to the exclusion of other confections. To the initiated, however, the matter is simple indeed. Chocolate makes an air tight covering that protects all sides alike. It makes it possible to keep candy not intended for immediate consumption and to ship it from one place to another without injury. Without it, the manufacturer would be in a bad way indeed. The confectioner, then, has fostered the chocolate habit because it is useful to him.

Crystallization enables the candy-cook to put ordinary cream and sugar mixtures into good society dress and make them a pleas-

ure to the people who are not devoted to chocolate. Although the crystal coated confection may not stand some of the harder tests that the chocolate coated candy will withstand, it will be found sufficiently reliable to mark a very great advance in candy-making, particularly in home candy-making. And after all, the basic mixtures in home-made candy are not so very different from those in the candy of the professional manufacturer. The home candy-cook, the small maker and the professional manufacturer, who is, of course, far better equipped for crystallizing than either of the others, can, after a careful study of the different degrees of sugar crystallizing, make almost any candy as satisfactory in texture and appearance, and as easy to handle, as are the chocolate confections. A sufficient number of dippings in the crystal accomplishes the result. "One part water and three parts sugar," is the slogan of the crystallizer. This is the composition of any crystal syrup. Although crystal syrups differ only in the temperature to which they are raised, their foundation is invariable. As long as the proportions

are kept the same, the quantities do not matter much — theoretically. Practically, however, one cupful of sugar and one-third of a cupful of water is about as much as can be handled effectively at one time. The success of the process lies in repeated dippings. With each immersion, the confection takes to itself a little more syrup; it thus acquires a heavier coating of the protective covering. The actual process is very simple. Each piece is separately dropped into the syrup and, after thorough immersion, is lifted out with a wire dipper, the surplus syrup allowed to run off, and placed for drying upon a wire screen.

In the pages that follow, frequent use is made of crystallization. In each case, the degree to which the syrup is to be heated is given.

It must be understood, be it noted, that this simple crystal dipping does not make the candy; it merely adds a protective and beautifying covering. The candy, already complete in a way, is dipped into the mixture of sugar and water. In the process that follows, however, the crystallization is of a different and more fundamental sort.

In this second case, the crystallization is the method of making the candy completely.

For small candies, a novel modification of French hand crystallization is useful because the process can be put to good use in the many sorts of candy-making. The candy-cook can well afford to make herself master of it. She should know, however, that the process is not so difficult as the description of it would indicate. Although the labor must be done on six successive days, the work requires but a very few moments except upon the first day.

The result desired is a slow crystallization which thoroughly cooks the base so treated and preserves it perfectly. In addition, the process ensures an appearance attractive to the eye and a flavor equally attractive to the palate.

A drying rack and a pan are the only utensils that are necessary. They should be of a size so that the rack will drop about one-half way into the pan and be upheld by the sloping sides. Note that the pan must be reserved for crystallization. If it is used for other purposes, it is likely

to absorb flavors that will work havoc with the delicate confectionery that is placed within it.

Make a syrup by boiling one part of water and three parts of granulated sugar for ten minutes. Thereupon place in it the base to be treated by this process. That all the pieces may be very thoroughly separated, stir the mass carefully with a wooden paddle; it is absolutely necessary that all the surfaces of all of the mass come into direct contact with the hot syrup. All that is necessary, however, is that each piece be thoroughly immersed in the hot syrup; in a surprisingly short space of time, the little pieces of confectionery will be heated through.

Have the rack in position in the pan; over it, pour the hot mass — syrup and all. See that the candy is evenly distributed over the rack. Immediately place a board over the pan; a molding board will do very well indeed. If a tin cover were used in place of the wooden, the steam would condense and drop back on to the candy instead of being absorbed. After the pan

has been left undisturbed for a full day, lift the rack out and pour the syrup into a suitable receptacle, cook to two hundred and twenty degrees and place in it again the candy. Take the crystal from the fire. Stir carefully, making sure that each piece is thoroughly immersed. Place the rack in the pan as directed above, and again pour over it the syrup with the candy in it. Note, however, that it is necessary that the wire netting be free from hardened particles of the syrup. Cleanliness, almost to the point of chemical purity, is necessary. This process must be repeated four times more, but each time the mass should be cooked two degrees higher — in each case, twenty-four hours must elapse between each treatment. After the last operation, the candy should be allowed to dry on the racks. The result will be found well worth the time expended.

VI

CHOCOLATE COATING

The ability to handle chocolate successfully is a great assistance to the maker of vegetable candy. Although chocolate coating is no more an essential in vegetable candy-making than in the old fashioned kind, there are very many times when the ability to use it effectively will be very useful to the confectioner. In either sort of candy-making, it is but a finish — as acceptable a finish to the one as to the other. Many people like the flavor of chocolate, and it is extremely serviceable because it furnishes a uniform covering for confections. Thus, when chocolate coated candies rub against one another in the box in which they are packed, their uniformity prevents their taking to themselves strange flavors and colors. No candy-maker should scorn to make herself master of the intricacies of chocolate coating.

The best instructor in chocolate coating is a few pounds of chocolate, firm, well-shaped centers, an allowance of time and interest, plenty of good common sense and inclination to profit by the hints given below. With the knowledge that will be accumulated after a few trials, the candy-maker will soon be able to give to her candy the niceties of the professional product. The confectioner can well begin with nuts, or some other hard centers, for they are comparatively easy to handle. By handling them, she will soon gain the experience necessary to the successful finishing of other textures. From surprisingly little experimentation, she will obtain sufficient skill to handle successfully almost any center that will take the covering.

A thorough general knowledge of the behavior of chocolate and a clear understanding of the behavior of the stock on hand are of more value than the methods of application of the coating. Since no two lots of chocolate are exactly the same, it is well to buy a fairly large supply at one time. In this way it is possible when han-

dling the first batch to learn the peculiarities of all the chocolate purchased and thereafter to handle the stock with assurance. For good results it is well to buy the regular "coating chocolate" which is sold by many grocery and specialty stores for just this purpose. If coating chocolate cannot be obtained, ordinary baking chocolate sweetened with confectioner's sugar can be substituted, but the substitution is to be avoided, for the finished work is sure to be inferior.

In all sorts of candy-making, climatic conditions are of the utmost importance. In no other branch of cooking is the cook so dependent upon the weather. In muggy weather it is impossible to do good work; often, indeed, it is impossible to do any work at all. Therefore, it is of the utmost importance that the confectioner yield respectful obedience to the humidity.

This warning is of particular weight in connection with the handling of chocolate. Even if the day is only slightly rainy, or foggy, do not try to use chocolate. Even experts do not defy this law, but since

they work under commercial conditions, they are generally able absolutely to control the atmosphere.

The room in which the actual operation of coating is conducted should be warm and dry. First, break into small pieces more chocolate than you will actually use in the coating. Put these lumps in a dish set over hot water and melt them slowly at a low temperature. To do this most effectually the water should previously have been boiled and the steam allowed to subside. Of course, the water must be very hot when the dish with the chocolate is placed over it. As the first piece melts, stir slowly from time to time. When the chocolate has melted, remove the dish from the heat and work all of the oil globules from the mass. This is accomplished not by hard or rapid motion, but by perseveringly and persuasively smoothing the mass until it is sufficiently cool. These oil globules, be it noted, must be treated with the greatest respect. If they become over heated, they are likely to require much more work, even if they do not ruin the batch.

In studying this melting process, it is well to think of the action of heat upon butter. Suppose, for illustration, it is desired to cream a lump of cold butter. If much heat is applied to the butter the outside immediately becomes running grease. It is possible that the cooler inside portion of the lump may be beaten into it, but the result will not be smooth. On the other hand, if the butter is allowed to soften gradually under the influence of moderate warmth, the whole mass would melt uniformly and could be beaten into the desired smoothness.

The warning that water must not be allowed accidentally to enter the chocolate cannot be too often repeated.

Probably this is the surest test as to whether or not the chocolate is ready for the dipping: Drop a center into the mass so that it will be covered with the chocolate, remove the surplus either by pulling it over the edge of the dish, or by shaking, and let the drop fall squarely upon the sheet of special confectioner's glazed paper, or of oilcloth, or oiled paper, upon

which it is to be cooled. Take care lest the piece slips when dropped. If it does slip, the base will have a thin projection that may break off and, even if it does not render the coating pervious, become unsightly. If the candy-maker is careful and the coating has been worked sufficiently and has been allowed to become sufficiently cool, the base will form squarely and evenly and the chocolate immediately will become firm. In other words, the candies should begin to set at once without forming projecting bases as soon as they are dropped upon the sheet upon which they are to dry.

Although chocolates should be covered in a warm room, they should be cooled as rapidly as possible. As soon as they are finished, they should be placed upon a small tray and removed to a cool place. The small tray is desirable since by its use the candies can be quickly transferred. In summer the tray should be placed in the refrigerator, but should not be allowed to remain for more than five minutes. If the chocolate coated confections are kept upon the ice for longer than that time,

they will soon be covered by a sweat that will ruin them.

After the coated drops have become cold, the candy-maker should examine them carefully. If the bases have spread, she can assume that the chocolate was not cooled sufficiently or that the surplus was not effectively removed. If the coating is streaked or light colored, she will know that the chocolate was not worked sufficiently, or that the drops did not cool quickly enough after they were coated. If the candy becomes sticky when it is brought into a warm room, the verdict will be that the oil was not properly worked into the mass.

In the chapters that follow, there are described many candies that offer desirable combinations with chocolate. In fact, the vegetable flavors are quite as adaptable to chocolate coating as are those that have already won popular attention and favor. Occasionally, in the subsequent pages, mention is made of the fact that the confection described may well be covered with chocolate, but more often chocolate coating is not suggested when it is possible.

It is assumed, and no doubt safely assumed, that the candy-cook, from her experience in the old-fashioned confectionery, will know what candy can be coated, and what cannot be successfully coated.

VII

SUGAR

No discussion of candy or candy-making is complete without a statement concerning sugar — its kinds, value and proper use. Without doubt sugar is one of the most maligned of foods. It does do damage when eaten at the wrong time or to excess. From this fact springs one of the great advantages of vegetable candy; in it the proportion of sugar to the bulk of the confection is so reduced that the normal craving for sweets is satisfied without the consumption of a quantity of sugar that insures disaster.

Experimentation long ago showed that sugar is the quickest source of energy in the whole list of available foods. No other food approximates sugar in the ease in which it can be formed into actual body energy. This fact has long been appreciated by athletes. One case in proof was that of two school boys seventeen and nineteen years of age, who had only two hours

a day for two months for practice before rowing races in which both were entered. No change was made in their diet except they were permitted to eat as much sugar as they wished, sometimes as much as one-third of a pound a day. One of them, however, did not begin to eat this excess sugar until the third week of his practicing, when he began to show the signs of over training — loss of weight and no desire for either exercise or study. On the third day after beginning the use of the excess sugar these symptoms disappeared, and he became as vigorous as the other. Before the time for the race both youths were in the best of physical condition and were victorious over their antagonists who did not believe in the use of sugar. Subsequently, observation revealed no bad after effects. Similar instances could be indefinitely repeated.

The fundamental fact — that sugar gives energy and gives it with great rapidity — has been made use of by army officers, particularly German.

It must be remembered, however, that sugar is purely an energy-producing food. It is necessary, then, that there be other

foods consumed with it in order to preserve a proper balance. These other foods, be it noted, are present in vegetable candy.

The current idea that sugar is fattening is wholly wrong. It is not sugar that is fattening, but too much sugar. Only when sugar is consumed in a quantity in excess of that which can be taken care of by the human commissary department, is it transformed into fat and stored as reserved material.

The methods of refining sugar have been so perfected within the last few years that it is safe to say that few food substances in commercial use are so near to being chemically pure as granulated sugars of good grade. No less an authority than Blythe says, " Loaf sugar is, as a rule, chemically pure. It is probably, indeed, the purest of all substances in commerce, and a large quantity may be burnt up without obtaining a trace of nitrogen and without leaving any residue. The only sugar that may be impure are the raw sugars."

It is commonly known that sugar may come from any one of numberless sources. Sugar of milk is the first sugar with which

members of the human race become acquainted, but one which, of course, is of little account in candy-making. The sugar of fruits is in an easily accessible form and one which is of particular value when combined with cane sugar. Honey as stored by the honey bee formerly was highly prized for food value, but now that it is so often stored by the factory without any activity on the part of the honey bee, and now that cane sugar is so very cheap, it is not so much in demand. For the sugar of candy-making, there are three sources: the sugar cane, sugar beet and the sugar maple. For practical purposes, maple sugar may be left out of the discussion.

Ever since sugar has been made on a commercial scale from beets there has waged a controversy as to the relative merits of beet sugar and cane sugar. As far as the amateur candy-maker is concerned, however, the controversy is not of practical interest, for almost all of the sugar that is sold in small quantities is made from beets. Indeed, it is said that it is practically impossible for the housekeeper to obtain sugar made from cane. Moreover, not-

withstanding the popular impression that cane sugar is preferable, scientists insist that in every case the pure cane sugar, or saccharose, can be crystallized out from either cane or beet, and that the sugar is identical in chemical composition, appearance and properties. By no chemical test known to the United States Department of Agriculture can pure crystallized saccharose from these different sources be distinguished. The popular impression to the contrary probably comes from the use of beet sugar that has been imperfectly purified. It is interesting to note that there are over ninety grades of sugar known to commerce. The difference between these grades is often so slight that it is impossible to distinguish without painstaking laboratory analysis. In this book white sugar and confectioner's sugar are used wherever possible because they are the purest kinds. Brown sugar and coffee A., much used in candy-making, are grades which have not been refined to so high a point.

A word should be said concerning glucose. The complaint which has been made

in connection with glucose has not been made against the substance itself, but against the way it was used. The amateur candy-maker, however, often has difficulty in obtaining glucose, even though in some processes it is most useful.

R. E. Doolittle of the Federal Board of Food and Drug Inspection, declares that no question of harmfulness has been raised by this board with respect to the use of glucose in food products. Where glucose is substituted for sugar and used instead of natural sweetening agents, the ruling has been made that its presence should be plainly declared upon the label of the product. The reasons for this action are: (1) where a manufactured substance is substituted for a natural one it is believed that the purchaser is entitled to be informed of the substitution; (2) the cost of glucose is usually somewhat lower than that of sucrose; (3) glucose consists only in part of a sugar, dextrose, and is inferior to sucrose in sweetening power.

In this country commercial glucose is manufactured from the starch of the Indian corn. The starch is suspended in

water, the whole placed into large steam tanks together with some hydrochloric acid, the steam is turned on to these tanks and the whole brought up to a heavy pressure. By this means the starch is partially converted into dextrose, a sugar, and dextrin, a gum. When the conversion has reached the proper point the pressure is removed, the hot liquid is neutralized with sodium carbonate, filtered and evaporated to a thick liquid. The resulting compound contains about 35 per cent. dextrose, about 45 per cent. dextrin, a small percentage of ash and the rest water.

A word of caution should be given concerning the time of eating sugar. Obviously if candy is consumed before meals it will destroy the appetite and interfere seriously with the meal. Obviously, also, it is unwise to eat heavily of candy before retiring. Notwithstanding her enthusiasm for vegetable candies the writer feels these cautions should be just as much observed with vegetable candy as with any other.

The whole question of the amount and form of sugar to be given to children, is one of utmost importance. Children lose

more heat from the skin for every pound of body weight than do the adults, and because of this fact, require proportionately more heat. This heat can come only from food and sugar is the food which produces this heat most directly and most cheaply. This need for a heat producing food, it could be urged, could be readily met by the use of fat. The difficulty is that fat, and particularly fat meat, is generally disliked by the child. Because of this distaste, his desire for all sorts of sweet things has undoubtedly a physiological basis. It is necessary, however, to observe very carefully the digestibility of sugar and sweetened foods in order to decide to what extent sugar is to replace starch in the dietary. The effect of sugar upon the appetite for other foods must be given particular care. Mrs. Mary Hinman Abel, president of the American Home Economics Association, says that, until a child's stomach is capable of digesting starch, the needed carbohydrate is furnished in the sugar of milk. The child a year old who drinks two quarts of milk per day takes in this way about three ounces of sugar. "As

the stomach becomes able to digest starch," Mrs. Abel continues, "the child is less and less dependent on the sugar of milk, replacing it with the carbohydrates of vegetable origin, while the proteids and fat found in eggs, meat, and cereals take the place of those constituents that were at first exclusively furnished in milk. Milk, however, remains through childhood a valuable source of all these food principles.

"The fact that sugar has a high food value is not the only point to be considered. The child will easily obtain the needed carbohydrates in other forms and will thrive if the digestion remains sound and its relish for wholesome food unimpaired. For instance, one often hears it said that a certain child does not relish milk. In such cases it might be found that the child's appetite, being sated by sugar in other foods, is no longer attracted by the mild sweetness of fresh milk, delicious as it is to the unspoiled palate. It would be well, perhaps, in this instance, to cut down the allowance of sugar in the hope of restoring the taste for so invaluable a food as milk. Dr. Rotch insists that the infant, even in its second

year, should never be allowed to taste sweets. He says, 'When these articles are withheld it will continue to have a healthy appetite and taste for necessary and proper articles of food.' Even much later, for the same reasons, the introduction of large amounts of sugar into the daily food of children is to be carefully considered. Children do not require a variety of flavors to stimulate the appetite, but the taste is easily perverted and the backward step is difficult to take. Those who have studied the food habits of children seem to agree that sugar should from the very first be withheld from the dish that forms the staple food of the child — that is, the mush or porridge of oatmeal or some preparation of wheat or corn. This article of diet, eaten only with milk or cream, falls into the same class as bread and milk, and forms the simple, wholesome basis of a meal. The sugar given the child is better furnished in the occasional simple pudding, in the lump of sugar, or homemade candy, not that its food value is better utilized, but the whole food of the child is thus more wholesome."

Mrs. Mary Hinman Abel concludes her

discussion with the statement: "Sugar is a useful and valuable food. It must, however, be remembered that it is a concentrated food and therefore should be eaten in moderate quantities. Further, like other concentrated foods, sugar seems best fitted for assimilation by the body when supplied with other materials which dilute it or give it the necessary bulk."

It is this fact, from the point of view of the dietitian, that commends vegetable candy so highly. The vegetable base gives the necessary bulk and dilution — in addition to adding other valuable food elements.

SECTION TWO

VIII

DECORATIVE CANDIES

I. FROM POTATO PASTE

Now that the use of vegetable bases is reduced to principles, the amateur confectioner need have no difficulty in working out in candy attractive and novel designs suitable to all special days and uses. And the best of it is — thanks to such a humble vegetable as the potato — she can follow her own ideas and fashion in confectionery a pattern that is all her own. Moreover, she can take comfort in the thought that in her product there is none of the highly injurious ingredients unfortunately all too common in some decorative candies.

As the foundation for one sort of decorative confectionery, potato paste must be made. Steam or boil Irish potatoes, drain them, and force them through a fine sieve, — the finer the better. With one-half cupful of Irish potato, so prepared, mix one tablespoonful of corn starch. Gradually

and carefully work in enough confectioner's sugar so that the mixture can be rolled.

The "fine sieve," be it noted, plays a conspicuous and important part in the making of candy from vegetables. Moreover, it should be borne in mind that no vegetable particle will either soften in or cook up into syrup. While cooking, the vegetable particles are just as individual as though they were in separate vessels; consequently they must be kept circulating as uniformly as is possible through the syrup in order to prevent the accumulation of masses of vegetable matter of sufficient bulk and weight to sink to the bottom of the sauce pan and cause the mixture to burn. Moreover, should the mixture escape burning, it would develop gluey spots that would make the finished product lacking in the smoothness that is the ideal of the candy-cook.

Flavor and color this paste to suit, place it on a surface well dusted with confectioner's sugar and roll it to the desired thinness. Cut it in shapes to suit. Cooky cutters or any other tin cutters may be used.

More often, however, the amateur confectioner will prefer her own design.

Cut a pattern of the desired design from paper, or, if it is to be used repeatedly, from paste board. Oiling the pattern not only gives it a firmer edge and prevents tearing but also allows any sugar or paste that may have adhered to it easily to be wiped off. Lay the pattern over the paste, and, with a sharp pointed knife, cut along the edges. Lift the newly cut forms carefully with a thin knife and transfer them for drying to an oil cloth or, if this cannot be done, to a waxed paper or a tin very thinly dusted with confectioner's sugar. Do not move them again until they are dry. If it is desired to pack the candy, cook a crystal — a "crystal" is a syrup of one part water and three parts sugar — to two hundred and twenty degrees and after it has cooled five minutes, dip the confection into it.

It is not essential that the forms be dipped into the crystal nor is the crystal absolutely necessary to any of the confections that are often coated with it. All this is explained in Chapter V — Crystallization.

A knife which is of almost constant use in making decorative candies and which is particularly satisfactory for lifting small forms is a palette knife such as artists use for mixing their colors. It is thin, flexible and sufficiently sharp for cutting fondant. Also the blade lends itself to use in many different positions because its curved shape allows the hand a degree of freedom not possible with the ordinary knife. The palette knife is much better for freeing or lifting forms from a flat surface than a spatula or a case knife.

The imagination of the candy-maker will suggest special designs for special occasions. The fancy of the confectioner will suggest many attractive original forms, besides the traditional red and white hearts for St. Valentine's Day,—note illustration No. 17 in the frontispiece—the green shamrock for March 17, and the hatchet for Washington's birthday. Christmas, New Years, Easter, Memorial Day, Fourth of July, Labor Day, Columbus Day, Hallowe'en and innumerable local holidays, like Bunker Hill day and Patriots' Day of Massachusetts,— all of these special occasions

offer abundant opportunity to the candy-maker who realizes that from the paste can be made representations of anything from a firecracker to a regiment of soldiers. Cooky cutters may also be used indefinitely; what child would not like candy in the form of stars, dogs, horses, and trees?

Green Leaves.— An excellent illustration of the possibilities of potato paste is given by green leaves. As the basis for them, color potato paste green, by the use of green coloring paste, of the harmless vegetable sort, and flavor fairly strongly with peppermint. Roll the paste thin, cut out the leaves, using the point of a knife or a tin cutter, and model the veins. A small, blunt, wooden tool,— even a clean orange stick will do — should be used to make the depressions that are the veins. After the leaves have dried on waxed paper, dip into a crystal cooked to two hundred and twenty-five degrees. Drain them on a wire rack and dust them evenly with granulated sugar. It is well to use a thin bladed knife to lift the pieces. See the small box in the middle of the illustration facing page 98, and No. 1 in the frontispiece.

II. VIOLETS

Violets.—In hot weather violets do not take kindly to the "candying" process, and in cold they are expensive and hard to get. There are no such limitations, however, to pop-corn and cocoanut. "Violets" made from them are especially good Christmas candies, because they are decorative and can be made a month or six weeks in advance—long before the last rush.

Pop-corn Violets.—Using the hard spots for centers, jam and break well-blown kernels of pop-corn until they resemble violets, as they will do with more exactness than would be thought. Boil one cupful of sugar and one-third cupful of water until a syrup is formed; the thermometer should register two hundred and nineteen degrees. After the syrup is cool, dip the pop-corn into it, making sure that the liquid forms an even and complete covering. As a thin crust begins to cover the syrup, keep pushing it down into the liquid. If this is done the syrup can all be used before it has time to harden. Immediately after the surplus

has drained off, dredge lightly with powdered sugar, into which has been worked violet coloring paste, previously moistened with a few drops of violet extract, or even water. In this case the colored sugar should be a shade or two lighter than is desired for the finished product, as the syrup darkens the color.

Note No. 2 of the frontispiece.

Cocoanut Violets.— Mix the white of an egg, one-half cupful confectioner's sugar — the kind sometimes known as XXXX — and one-half cupful of Irish potato prepared as directed above. This makes more candy than the home confectioner ordinarily has use for, but directions for a smaller amount cannot well be given owing to the practical impossibility of dividing an egg. An easy way out of the difficulty, however, is to use as much of this mixture as is desired for the violets and to save the rest for use in making potato fondant, described hereafter.

Flavor this mixture with violet extract. Add the color with the extract, but remember that a little will go a long way. Use vegetable violet coloring paste until the

color is a shade or two darker than is desired for the finished product. Stir in cocoanut until all the mass adheres to the cocoanut. Baker's cocoanut is better than the shredded, but often the shredded must be used, as the other size is becoming more and more difficult to obtain. If the shredded is used, break it so that each piece will not be more than one-half inch long. If the mixture does not then dry readily, stir in more confectioner's sugar.

To fashion the violets, dip the fingers into cold water, take up a quantity of the preparation about the size of a violet, and model into the shape of the flower. A little practice will enable the candy-maker to form objects that look more like violets than do the flowers themselves after they have been put through the candying process. Sift granulated sugar over each flower, shaking off surplus sugar. Dry on waxed paper. This confection would better be used within two or three weeks.

Violet Boutonniere.—From violets, preferably cocoanut, boutonnieres very attractive for favors can be fashioned. Have

ready a supply of the violets, candied cress leaves, violet, green or tinsel foil, lace paper mats,— small paper doilies may be substituted,— and number twenty-two wire. It is well to cut wires six inches long for they can later be trimmed or bent to form a stem of from three and one-half to four inches long. With a fine needle puncture the back of a cocoanut violet and insert the end of a piece of wire. To make the union firm, place a drop of thick syrup at the point at which the wire enters the mixture. Seven violets so treated will be sufficient for one boutonniere. In a similar manner, wire one less of the crystallized cress leaves. Put all the wires through the center of the mat. Group the violets about one placed in the center. As nearly all mats come with an even number of designs in the edge, it is much easier to arrange the boutonniere if the row of flowers next the mat contains an even number also. The leaves should be so arranged in a row underneath the flowers. Before an attractive arrangement can be made, some little experimenting may be necessary. Wrap the wires with tissue paper and cover with foil. The making of

the boutonnieres is not so difficult as it sounds, though some knack is required for the best results.

See the illustration opposite page 72.

III. FROM POTATO FONDANT

Uncooked Fondant.— Potato fondant is another base — even more useful than potato paste — upon which many confections may be built. There are two kinds — cooked and uncooked. To make the uncooked, boil or steam Irish potatoes, drain, and force them through a fine sieve. In all candy-making with potatoes, these directions are of the utmost importance. Unless the potato is carefully forced through a fine sieve, the candy made from it will have hard and gluey spots after it has dried out. Mix one-half cupful of the potato so prepared with the unbeaten white of one egg. Add gradually confectioner's sugar until the whole mass assumes the consistency of bon-bon cream. Several uses for potato fondant will be described below, but it may be substituted for French fondant in any of the confections of which that is a part.

Cooked Potato Fondant.— With one-half cupful of potato, prepared as for the uncooked fondant, very thoroughly mix two cupsful of sugar and thin with two-thirds of a cupful of milk. Place the mixture on an asbestos mat over the fire and cook until thick — to the sticking point. Pour the mass on a cold, damp marble and "cut in" like plain fondant. Knead small quantities at a time until the whole batch is smooth. Pack in tins lined with wax paper.

The fondant can be used without additional sugar and does not stick to the hands. It is particularly useful as a covering.

Modeled Candy.— Modeled candy is easy to make, good to look at and good to eat. When shaped to imitate fruit or vegetables, it is useful as table decoration, and is always welcome for children's parties. Indeed, there is no sort of candy that is surer of a warm welcome by young or old!

The difficulty has been, however, that modeling with almond paste requires the use of ingredients that are very expensive and very often difficult to obtain. This has made experimenting in modeling rather ex-

pensive for the unskilled home candy-maker. Potato fondant, on the other hand, is inexpensive and so easily obtained that the amateur need not count the cost of failures while she experiments. By following the directions carefully very little practice in the modeling will give her a facility that removes her from the class of unskilled modelers. If she prefers to use almond paste, the home candy-maker may do her practicing with potato fondant. Moreover, many young women have studied clay modeling and to them the modeling of candy is indeed simple. While the modeled candy that is sold in candy stores often — though not always — contains harmful substances, potato fondant is absolutely wholesome.

Potato fondant shows particular superiority over the almond paste in the making of small objects and all fine and thin work. The results are as attractive to the palate as to the eye, although candy modeled from potato fondant does not have the peculiar oily richness of the products fashioned from almond paste.

For one batch take as much of the un-

cooked potato fondant as the work in hand calls for. Into it work all the sugar that it will take. Stop the kneading just as soon as the mixture shows a tendency to crumble. Model it into any form desired. It is best not to make the pieces too large. The modeling may be done with the small clay modeling tool now common in kindergartens and technical schools, or with a clean orange stick.

A thin sheet of glass will be found exceedingly satisfactory upon which to model. As the glass is thin, intricate flowers of many petals, for instance, can be slipped off with little disturbance. Use a thin knife to loosen and lift only slightly, slipping each model off with as little handling as possible. Another advantage is that the glass can easily be washed.

Coloring.— The vegetable coloring pastes which are sold for use in cooking are harmless. A set of the small jars ordinarily sold for ten cents a jar will probably be enough for any candy that the amateur may make in one season. The colors generally in the set are fruit red, leaf green, golden yellow, caramel, violet, damask, rose,

mandarin, orange blue, salmon and chestnut.

These pastes may be used in three ways. They may be cooked or worked into a candy mixture or they may be used very much the same as water color pigments and applied with a brush.

In the first method it is well to remember that the shade should be mixed a little heavier than desired and must be very thoroughly mixed if used in fondant or prepared compounds. The rules of color combination prevail here as everywhere. So if grades of tone or different colors are desired almost any wish may be met by combination of color.

To get just the tone desired, after mixing the colors dissolve a small portion in water and then dip into this liquid a lump of sugar. If the tint is not the right one, it is easily changed.

Any shade of green may be obtained by mixing blue and yellow with leaf green. All shades of orange are obtainable from yellow and red. All shades of violet or mauve or even purple for deep violets may be made from red and blue in different proportions.

If the color in your candy is not clear and uniform it is because it has not been thoroughly mixed. To avoid spots it must be evenly incorporated through the entire mass. If this does not seem possible with coloring paste, dissolve in a little warm water and then add it to the fondant or prepared compound.

In applying with the brush use the wash methods much as in water color work and the shading will be much more artistic and the variety much greater. Apply a medium shade uniformly and let thoroughly dry and then shade with light and darker tones. Do not use much water, as the surface of the candy does not absorb the water as does water color paper.

White Daisy.— This makes an unusually pretty modeled piece, as will be seen from the illustration facing page 138, and from No. 13 of the frontispiece.

White potato fondant is used for the petals and candied orange peel for the center, and angelique for the stem and leaves.

Flavor the potato fondant with one of the stronger extracts such as peppermint, cinnamon or cloves. If desired it may be

used without flavoring, but the more delicate flavors are not so pleasing. Mix enough sugar with the fondant for it to mold smoothly and easily and hold its shape. Upon a clean piece of glass, or oil cloth, if glass is not easily obtainable, place a piece of angelique of a size suitable for the stem. To form the petals roll pieces of potato fondant between the fingers. Properly arrange these petals around the center. Press a piece of candied orange peel down upon the stem and petals. This peel gives the yellow center of the daisy and acts as an additional means for holding the stem and petals together. Or, yellow fondant may be substituted. Run a thin knife under the flower and lift it over the glass to an oil cloth placed over a board or to a piece of waxed paper and dry for twenty-four hours.

Cook to two hundred and twenty degrees, a syrup made of one cupful of sugar and one-third of a cupful of water; pour this into a dish so that the syrup will be about an inch deep. Add to the daisies such leaves cut from angelique as may be desired and then dip into this liquid and lift

upon a wire rack. In the making of this as in all composite models the crystal syrup — one cupful of sugar and one-third cupful of water cooked to two hundred and twenty degrees — is an essential asset for gluing purposes. A small bristle brush is good for applying, but care must be used as in using glue not to use too much of the syrup. The syrup, when dry, will hold the leaves to the stem. If the amateur confectioner is very conscientious, she may improve the looks of the flowers by coloring the outside edges of the centers lightly with sugar — first a little brown and then a touch of yellow placed there with the pointed end of the modeling stick.

Before the flowers have thoroughly set, free them from the wires of the rack. Shortly after the dipping, when as much of the syrup as will has run off the flowers, run the fingers along the under side of the rack springing the wires under each piece. This method not only frees the flowers but it rids them of undue accumulations of the syrup. Otherwise, the wires would dry into the candies, which would

be broken upon their removal. Leave on the rack until dry.

Yellow Daisy.— Yellow daisies may be made by coloring the white potato fondant or by making fresh fondant, using the yolk of the egg in place of the white. The fondant made of the yolk will not model quite so readily but coloring is unnecessary.

Form the yellow daisy as the white, but use a small raisin for the center, instead of the piece of orange peel. No colored sugar is necessary. Crystallize as before.

If exceptionally bright and clear colors are desired, the flowers may be dipped twice into a thin crystal instead of once into an ordinary crystal. Use the same proportions of sugar and water — one cupful to one-third cupful cooked to only two hundred and twenty degrees. Into this dip the flowers after they are thoroughly dry, and dry on a rack as before. The next day dip them again into a crystal of the same sort. Dry as before. The result will be glossy flowers, free from crystals, with particularly beautiful yellows and browns.

Calla Lily.—This is particularly suitable for Easter time. For the stem, use a small

stick of angelique. Make the center from yellow fondant. While still moist, dip into granulated sugar. See the illustration facing page 138.

If the yellow fondant is not on hand, a little of the ordinary white may be colored yellow and used. It is hardly worth while to make up a batch of the special egg fondant for one set of lilies.

From the white potato fondant, pat out rather thin pieces, wrap them around the stem, form the lily and curl the edges and make the pointed top and the front fold prominent. If leaves are desired, cut a long leaf from the angelique, dip the stem end into thick syrup and fasten to the stem. To make a perfect union, cover the stem below the lily with syrup.

If the lilies are to be used for box trimmings, do not make the stems very long and if leaves are used, bring them up well onto or behind the flower to give added strength so that the stems will be unlikely to break at their juncture with the lily.

Red Apples.—As dinner favors, red apples are unusually effective. For the foundation use pulled figs, stuffed with any good

mixture. Nuts and pitted dates may be used for the filling, but the combination is a little too heavy. Marshmallows and pecan meats are preferable. A third possibility is chopped nuts and figs. Whatever filling is used, the method of its insertion is the same. If the figs are dry, steam them thoroughly. Make a slit in the side, fill with the chosen mixture, and pinch together the edges of the opening.

As the covering for the figs, uncooked fondant must be used. Cinnamon is a popular flavoring. Color it with red paste. At this stage in the process it should not be made the shade desired for the finished product, but there should be enough of the red to overcome the dead white of the fondant. In other words, make the first coating much lighter than it otherwise would be. Into the uncooked fondant, sugar must be worked until modeling is easy.

Encase the stuffed fig in fondant. The thickness of the coating will depend upon the size of the fig; the finished product should be about the size of a real apple. Model the surface so that it looks as much like an apple as possible. If it is desired

to have the confection all edible, use a piece of angelique for the stem; a twig from a vine or bush really looks better, however. For the blossom end use a clove. If the general directions given above are followed, the result will be a surprising naturalness.

Proceeding as directed on page 64, use the vegetable coloring pastes for the coloring. As the red color paste is likely to have the magenta shade overmuch, the first coating would better be of orange and the second of enough dark red to give the true apple red.

To intensify the color and leave the apple glossy, brush it with crystal syrup cooked to two hundred and twenty degrees. The syrup should be used while yet warm and should be applied smoothly.

By the use of other colors, other sorts of apples can be made.

Before being eaten, these apples, like real apples, should be cut into sections.

See the illustration facing this page, and No. 24 of the frontispiece.

Single Roses.—They may be pink, red, yellow or white. The process in each case is the same except for the coloring and the

Fascinating to the Child

flavoring. Take as much fondant as is needed for roses of one color and as the base, use uncooked potato fondant. Divide it into three lots and color with paste the shade desired — the first so very faintly that its tint is just off the white, the second a little deeper and the third deeper still. Always remember that immersion in hot syrup deepens the color. Remember, too, that the three lots of different shades are for roses of one color only.

For red roses, use cinnamon flavor and red coloring. For yellow roses, use clove as flavoring and yellow as coloring. Yellow roses are shown as Nos. 3 and 26 of the frontispiece. Be very careful not to use too much color. For white roses, use the plain fondant, but after the rose has dried a touch of green must be added to give depth and character.

For pink roses, use rose water as flavor and pink as coloring.

Whatever the color of the rose, form five petals, curling the edges to imitate those of the natural rose, and using different shades for different petals so that the rose will have natural variety of color. At the center

use a small piece of angelique; a touch of darker green coloring to the center of the angelique gives the rose greater verisimilitude. It is well to model them upon a sheet of glass and when completed lift on to a waxed paper to dry.

If the rose is a white one, let it be remembered that it must be shaded with light green.

When the flowers are dry dip them into a crystal, cooked to two hundred and twenty-five degrees. Use brown and yellow sugar to imitate the pollen around the green centers. The pointed end of the wooden tool will be useful in placing these colored sugars. They must be made to stand out clearly. If too much syrup has collected around the center, be sure to push it out with the blunt end of the tool before trying to put the sugar in place.

After the roses have dried, they are ready to look at and eat.

Rose Buds.—From potato fondant, colored as desired, model several small petals. Cut a piece of angelique to represent the stem and properly arrange the petals around one end of it and press them on. The leaves

and thorns are to be made from angelique and attached by pressing them to the stem using the crystal, prepared for the dipping, as glue.

The calyx, made from angelique, may be also so attached. When the buds have dried dip them into a crystal cooked to two hundred and twenty-five degrees. Dry on racks. The crystal will make stronger the union of petals, leaves, thorns and stem.

New Potato.—A particularly appropriate form in which to model the potato fondant is that of the new potato. Work the proper sized piece of fondant into as close an imitation as possible of the new potato.

As this new potato has perhaps more of the fondant than many people will wish to eat at one time, several partial substitutions are possible. That statement, by the way, is no reflection upon the fondant, for any piece of candy, no matter how good, of the size of this is likely to be rather too much to be eaten at one time if of one flavor. Marshmallows, pitted dates with nut meats, pulled figs closely rolled, or English walnut meats are some of the things that may well be used as centers. Whatever is used

should be rolled in enough of the fondant to make pieces of the desired size and form and then immediately rolled in dry cocoa.

The result will be strikingly convincing — and good to eat.

Pea Pod.—From fondant colored green, a pea pod may be modeled, split, and the peas modeled and placed within. When the forms are dry, dip them in a crystal made by boiling one cupful of sugar and one-third cupful of water to two hundred and twenty degrees. Use care that the syrup does not settle between the peas. Granulated sugar dusted over the pod gives a beautiful soft color and surface.

Snow Balls.—All modeled candies are a delight to children, but snow balls always meet with a particular favor.

Stuffed figs, prepared as directed for red apples on page 70, form the basis for them. To keep the color of the figs from showing through, cover them with the uncooked fondant and roll in the hands until perfect balls are formed. After the balls have dried two or more hours, roll them again in this coating of uncooked fondant to which has been added a small quantity

of blue coloring. This is to insure the balls being snow white. Brush these balls with the unbeaten white of an egg and roll in equal parts of crystal and granulated sugar.

Grapes.—The confection described below and pictured opposite page 72 is good to look at, good to eat, and comparatively easy to make. It should be borne in mind, by the way, that the directions for candies often sound more difficult than the actual process.

As the basis for the grapes, take smooth almonds, not blanched. Into the smaller end of each one insert nickeled wire, pushing it well into the nut. Then cover the nuts with potato fondant. Work them with the fingers until they assume the forms of single grapes. Dry in a corn-starch bed. When the forms are dry, brush all the corn starch off. The grapes so formed should be colored a medium shade by the use of vegetable coloring pastes to resemble catawba or purple grapes. Because of the opaqueness of the grapes, they cannot be made to imitate closely the color of green grapes, but if the confectioner has an unusual fondness for

green grapes, and is not over particular, there is no reason why she should not attempt them.

After coloring, dry the grapes thoroughly on a wire screen, finish them in thin crystal, which has been colored somewhat lighter than the shade the finished grapes are expected to assume. In order to leave the confection with a glossy surface, it is possible to add to the crystal a very small quantity of gum Arabic.

After the crystal is thoroughly dry, the wires should be wound with raffia of the leaf green shade, and, by twisting the wires together, the single grapes formed into bunches of the size desired. If the confectioner wishes large bunches, it is well to wind the wires onto a tree twig, for the sake of the additional firmness. It should be remembered that the large bunches are heavy. The use of the twig is also recommended for the natural appearance it gives to the finished bunch.

Brush the stems with a thin syrup. The loose ends of the raffia may be disposed of and the appearance of the confection made more natural by dampening them with the

syrup and winding them around any round object of about the size of a lead pencil. The ends of the raffia, so treated, will resemble tendrils.

In taste, the grapes are much like the usual hard-covered almonds.

Other Possibilities.—If the candy-maker has ambition and imagination, she will regard the foregoing objects as merely suggestive; she will work out for herself other objects of equal interest. The following suggestions as to coloring, she will find valuable no matter how much she may want to create for herself. For pears, use yellow with red; for peaches, yellow with a very little red; for pumpkins, light orange with touches of green; for radishes, light red, with green for the stem; for carrots, orange with a slight touch of green; for plums, the so-called violet with a very little red; for strawberries, red, touched with yellow to simulate the seeds—and so on indefinitely.

IX

POTATO CARAMEL

Three receipts are given for potato caramels and one for opera caramels. It should be noted that opera caramels and the ordinary potato caramels are as different as fudge and taffy. The first of the receipts for potato caramels is by all odds the best, but it means much hard work. The second is much easier, but the results, while good to eat, are not so pleasing in looks or consistency. The third is a compromise. In none, owing to the very slow cooking, is it possible to use a thermometer to advantage. The old tests, supplemented by a sort of intuition that old candy-makers call "caramel sense" will have to be used to determine when cookings are completed. But with good fortune and a little experimenting, the amateur confectioner's judgment will soon become accurate.

Potato Caramel No. 1.

Stir well one pound of sugar, one cupful of milk, one cupful of Irish potato — boiled and sifted as directed before — two tablespoonfuls of butter and one-half teaspoonful of salt. Boil until thick, and thin with one-half cupful of milk, and again cook until thick; again thin with one-half cupful of milk and cook until the mass is of caramel consistency, tested in cold water. Stir as little as possible, but be careful that the mass does not stick to the bottom of the kettle. Pour on a well oiled marble between candy bars. Dry two days, cut in strips and dry again before finally cutting in squares. Place them in a cold place for several hours and then wrap them in parchment paper. They keep well.

This is the kind of potato caramel that is especially good for chocolate coating, although all of the potato caramels can be chocolate coated. Make the caramels as above and allow them to dry in the open air for several hours and then cover with chocolate.

The process is fully as laborious as it sounds, but the results are more than worth

the trouble. The repeated cookings give the characteristic caramel taste and color. The following receipt, however, means less work.

Potato Caramel No. 2

Boil together one cupful of granulated sugar, one cupful of coffee A sugar, one-half cupful of Irish potato — treated as before — one tablespoonful of butter, one cupful of milk, caramel coloring. Stir continually until the mass forms a soft ball in cold water. Then pour it onto a well oiled marble between candy bars.

Potato Caramel No. 3.

Boil one pound of brown sugar, one cupful of milk, a piece of butter the size of a walnut, and one-quarter cupful of Irish potato — prepared as before — until a bit dipped from the mass will form a firm ball in cold water. Stir as little as possible. Pour on an oiled marble between candy bars. The result is more like fudge but is cooked to dryness without being grained by beating.

Opera Caramel

To two cupsful of sugar, one cupful Irish potato boiled, drained and forced through

a fine sieve, add one tablespoonful of butter and thin with one-half cupful of milk. Cook until thick; remove from the fire. Put in one-half cupful of milk again. Cook until thick, remove from the fire and add one-half cupful of milk. Return the pan to the fire again. This is the last time. It is wise to place an asbestos mat under the saucepan. Cook until very thick — until a soft ball can be formed in cold water.

After the mass has been removed from the fire, add one cupful of broken walnut meats, and one cupful of bon-bon cream, broken in small pieces so that it will be distributed quickly through the mass without much stirring and pour the mixture between candy-bars on an oiled marble. When cold cut it into squares; for home use it will not need wrapping.

As with potato caramel No. 1, this confection is most pleasantly susceptible to chocolate coating. Allow it to dry in the open air for several hours and then cover with chocolate as usual.

Broken nut meats can be added to any of the caramel recipes above.

X

POTATO — MISCELLANEOUS

Potatoes are probably the most useful vegetable known to the maker of vegetable confectionery. As has been explained in the preceding chapters, they are the basis of potato fondant and potato paste, both of which are basic mixtures.

The usefulness of the potato does not end with decorative candy. In the form both of paste and fondant and prepared in other ways, it is responsible for several pleasing new confections.

Mocha Walnuts.— To the yolk of one egg beaten to a cream, add one-half cupful of Irish potato — boiled, drained, and forced through a sieve as described before—and one teaspoonful of coffee extract. Gradually stir in confectioner's sugar until the mass can be made into soft balls. Flatten these balls, press on walnut meats, and spread to dry. If desired for packing, dip

them into a crystal cooked to two hundred and twenty degrees. To insure a good surface and keep the cream from drying out, it may be well to dip the candy again after letting it dry a day.

See No. 8 in the frontispiece.

Pecan Creams.—The process for making them is the same as that described for making mocha walnuts except that lemon or vanilla extract is used instead of coffee, — see No. 14 of the frontispiece — and pecan meats, instead of walnut meats. Indeed, the imaginative candy-cook will be able to invent for herself several other new confections built upon this same principle.

Raisin Creams.—To make them, form potato fondant — directions for which are given on page 61 — into balls and place a seeded raisin on each side. Cook a crystal syrup to two hundred and twenty-eight degrees and keep it warm by the use of the steam bath. Into it, dip, one by one, the fondant balls, prepared as above. Dry on racks. If desired, ordinary bonbon cream, flavored and colored to suit the cook's fancy, may be substituted for the potato

fondant. A satisfactory variety is given these raisin creams by pulling the raisin entirely over a pecan meat before attaching to the cream. This confection is rich in flavor and most attractive in shape.

Peppermint Chocolates.—Potato paste—described on page 52—is the basis for them. Make a softer paste by using less sugar, work in peppermint to taste, form it into balls, flatten and dry for a couple of hours. Then dip them in chocolate as usual. After the finished candy has stood for a time long enough for the chocolate covering to have mellowed the center, the result will be a cream of excellent flavor and a texture unusually attractive because of its grain. The difference between this and the ordinary peppermint chocolate is so great that they really are not the same confection.

Celtic Almonds.—This attractive confection is in reality a cream, but a cream so different from the ordinary nut cream that it seems to fall into a separate class. In place of the usual richness, there is here a delicacy of flavor and clearness of outline

that is a distinctly enjoyable addition to confectionery.

Blanch almonds, split them, and dry in a soft cloth. Color potato fondant pink and flavor it with rose. Roll fondant so prepared into small balls, and place upon each side of each a split almond. Each piece should then be made to imitate as clearly as possible the shape of the real almond. The ideal result is a confection that is very little larger than the real almond with a thin layer of cream between translucent nut meats. After a little experimentation, persuasive fingers can accomplish this result. When fashioned, dip the candies into a crystal syrup cooked to two hundred and twenty-five degrees and roll in granulated sugar.

Walnuts or pecans can be treated in the same way with white or colored fondant. The result, however, will not be so distinctively dainty and will be little improvement upon the mocha walnuts and pecan creams described above.

Chocolate Bars.—As the basis, take cooked potato fondant which has been well kneaded. Form it into a sheet about one-

quarter of an inch thick. Cut therefrom bars an inch and a quarter long by a quarter of an inch wide. Dip them in chocolate and let them dry.

A pleasing variation is made from the same base — cooked potato fondant. Knead into it melted chocolate. A portion of the resulting mass may be formed into balls and the rest rolled into a long piece as slender as a pipe stem. This small cylinder should be cut into two inch lengths and the ends pointed. Another method is to make small balls and give these a very thin coating of white fondant. In any case, dry on a corn starch bed and coat with chocolate.

Vegetable Cream.—Vegetable cream is another base with which much can be done in vegetable candy-making. In itself, it is good to eat and can be made to take many different and useful forms. To make it, mix two cupsful of sugar, one cupful of Irish potato—boiled or steamed, drained and forced through a sieve — one teaspoonful of butter, and one-half teaspoonful of salt. Boil to two hundred and twenty-eight degrees. Have ready one-fourth cupful each of preserved garden "ginger" and spiced beets drained from their syrup;

cut very fine, and spread upon a marble slab. Over beet and "ginger" pour the cooked mixture, and "cut in" as for fondant. "Gingers" are described upon page 101 and spiced beets upon page 111.

Below, there are suggested five ways of using the cream. Many others, however, will come to the mind of the experienced candy-cook.

Vegetable cream may be formed into balls and rolled in granulated sugar. The balls so prepared may then be rolled in shredded cocoanut, cut fine, or the balls without the sugar may be covered with the cocoanut.

Another possibility is to dip the balls into chocolate. Nuts may be added, either by rolling the balls in the meats cut into little pieces, or by pressing the meats into the balls and treating with the crystal syrup, or by using a drop or two of the crystal to glue the nut meat to the ball and then coating. Moreover, the balls may be used in their simple form without any covering at all.

No matter what is done with them, of course, they must be dried off before serving.

XI

SWEET POTATO

Sweet potatoes used as the basis for candy-making should be baked. Boiled sweet potato changes color during the succeeding processes and retains an amount of water that is likely to cause trouble. After baking, the potato should be forced through a fine sieve. Make sure that the sifting process is done so thoroughly that all fiber is removed.

Sweet Potato Patties.—For the patties, boil until very thick one pound of granulated sugar, one cupful of sweet potato prepared as above; one-half cupful of desiccated cocoanut, and one-half cupful of water. When the mixture has cooked, add one-half cupful of bon-bon cream, cut into small pieces. Stir thoroughly. As the mass begins to set, drop it quickly on waxed paper in small drops. Act promptly, for the mass sets quickly. The drops will not be smooth.

To improve the looks of these patties, they may be dipped in a crystal syrup, cooked to two hundred and twenty degrees; and then dusted with granulated sugar. If they are not wanted immediately, they may be packed for any length of time not exceeding six weeks provided they have been finished with the crystal and granulated sugar.

Sweet Potato Knots.—Cook until very thick equal quantities of granulated sugar and sweet potato—prepared as before—and add a few drops of oil of cinnamon. If another color is preferred to the natural amber, add coloring paste to suit. Immediately spread the mixture over a tin sheet upon which has been sifted confectioner's sugar. The tin should be of such a size that the mass will be about one-quarter of an inch thick. When it has dried so that it will not stick to the fingers, with a long, thin knife, cut narrow ribbon-like strips about six inches long. Fashion them into bowknots. Be sure that there is not undue thickness at the center. The tools described in the second chapter — particularly page 16 — will be useful as will also

be the glass sheet. If the candy is moist, dip the hands into XXXX sugar. Dry on oilcloth or waxed paper. When firm, dip into a crystal which has been cooked to two hundred and twenty-five degrees and allowed to stand for five minutes. Dry on a screen.

Their attractiveness can be seen at a glance at the foreground of the illustration opposite page 138, and by looking at No. 18 in the frontispiece.

Sweet Potato Pastilles.—They are made from the same mixture as are the knots. While the mixture is still hot, drop it in small drops upon a cold bare marble, and dust them with granulated sugar. When they have dried for several hours, or, if possible, over night, lift with a thin knife, place two drops together by their bases, dredge again with granulated sugar to cover the edges, and dry.

XII

PARSNIP

Crystallization forms the basis of candy-making with parsnips. By means of a modification of the old fashioned French hand method, it is possible to make a confection that is good in itself, useful as the basis for other confections, and of unusually long keeping qualities. Parsnip candy, though the invention of to-day, has a pleasing old fashioned taste and appearance.

Candied Parsnips.— In method of preparation and keeping qualities, they resemble the candied flag root of our grandmothers. They are useful to trim a box of candy. Peel the parsnips and leave them in cold water for two or three hours. Cut crosswise into very thin slices, drop the slices into boiling water, and let them boil five minutes. After they have thoroughly drained, put them into a syrup made by boiling together one part of water and three parts of granulated sugar. Make sure that the syrup really is a syrup — that the sugar

and water have thoroughly united. Add the parsnips and boil for ten minutes.

Next comes the use of a novel modification of hand crystallization — a process that the amateur candy-maker may well afford to make herself master of, because it is useful for many confections. Obtain a pan with sloping sides into which the drying rack will drop half way. As the pan must be used for candy-making and nothing else and as the greatest strength is not necessary, a suitable dish can probably be obtained from a ten-cent store. Stir carefully with a wooden paddle in order to make sure that all the pieces are separated and that the hot syrup comes into contact with all the surfaces of the confections.

Pour the hot mass over the rack — in position in the pan — and immediately put a board over the pan. Make sure that the vegetable is evenly distributed. The wood absorbs the moisture while a tin cover would make trouble by causing the steam to condense and drop back onto the candy. Leave the pan undisturbed for twenty-four hours. Then lift the rack out, pour the syrup into the kettle and cook to two hundred and

twenty degrees. Return the vegetable to the syrup and stir carefully; each piece must be immersed. The small pieces of candy will be heated through in so very short a time that it is necessary only to make sure that each piece has been thoroughly immersed in the hot syrup. Make sure that the rack is clean and free from particles of the syrup. Thereupon, again pour it over the rack arranged in the pan as before. Repeat the process four times, each time cooking the syrup two degrees hotter. The result is a slow crystallization which covers the candy so that it is perfectly preserved and very good to taste and look upon. Although the work must be distributed over six days, only a very few minutes are required except upon the first day.

Parsnip Boutonniere.— The candied parsnip forms the basis of one of the most decorative of all boutonnieres. For each of them have ready, besides a supply of the parsnips, candied as above, artificial fern, sometimes sold under the name "imitation air plant," a lace mat, a number twenty-two wire, and one yard of ribbon one-half inch

wide, the preferred color. See the illustration opposite page 72.

Mix one cupful of sugar and one-third cupful of water, and color the same as the ribbon. Cook the syrup thus made to two hundred and twenty-five degrees. Into this hot syrup drop the crystallized parsnips, and allow them to remain a few minutes. After they have become thoroughly and evenly colored, pour them upon a wire screen. After they have dried, attach to about two dozen of them pieces of wire about six inches long. It is well to place a drop of thick syrup at the point at which the wire enters the candy.

Cut the ferns into lengths of from two to four inches. Mix the wired candies through the bunch of ferns, occasionally twisting a strand of fern around the wires so that all wires will be hidden. Slip the lace mat up over the wires and the ends of the ferns, wrap wires with tissue paper and cover with tinsel foil, either silver or gilt, and tie the center of the ribbon around the stem directly under the mat and form a rosette. About five inches from the point tie the ends together in a bow knot.

XIII

CARROT

To the art of candy-making, the use of carrots has brought a harmless new color. Formerly the peculiar yellowish orange of the carrot candy was a shade that the confectioner, amateur or otherwise, could not hope to attain without the use of artificial substances.

The statement that carrots are valuable in candy-making for their color must not be thought to mean that the confections made from them are not very good to eat. Quite the contrary; carrot candies have a very pleasing flavor.

Carrot Rings.— To make them, peel medium sized carrots and let them stand several hours in cold water. Cut crosswise into slices about one-quarter of an inch thick and with a small round cutter or sharp knife remove the center pith. Drop the rings into boiling water and cook until tender. After they have thoroughly drained,

drop them into a syrup made by boiling one part of water and three parts of sugar to two hundred and twenty degrees. Boil until the rings become translucent — probably about ten minutes. Dry on a wire rack, taking care that the rings do not touch. The next day, heat the syrup to two hundred and twenty-five degrees and again dip the rings and dry as before. If desired, when they are dry, fill the centers with bonbon cream or marzipan. When this center has become firm, dip the candy into a syrup cooked to two hundred and twenty-eight degrees. Even if the centers are not filled, it is well to make this third dipping; the thermometer should, however, register two hundred and thirty degrees instead of merely two hundred and twenty-eight.

Crystallized Carrot.— For this confection, proceed exactly as directed in the previous chapter for crystallized parsnip, substituting, of course, the carrots for the parsnips.

Carrot Roll.— From ordinary cream fondant or from cooked potato fondant, make a thin strip about an inch wide. Place upon it small pieces of the crystallized carrot, prepared as directed above, and roll so that

Boxed Vegetable Candies

there is formed a long tube filled with the candied vegetable. Cut this tube into pieces as long as desired — half an inch is about right — and after drying until quite firm dip into a crystal cooked to two hundred and twenty-five degrees. If the pieces are not firm when they go into the crystal bath they are likely to soften and lose their roundness.

"Gingers."—Preserved ginger is a delightful confection, but it is expensive, and cannot be obtained in every town. There is a substitute that when properly prepared has an added charm, because it is the product of the candy-maker's own art. Note the box at the extreme right of the illustration facing page 98.

Garden "Ginger."—Take white carrots, preferably of fine texture, boil them five or ten minutes, scrape off the outside layer, cut the carrots in quarters, lengthwise, and remove the cores. Then remove the point and cut the remainder into slices about the size of the pieces of preserved ginger. Boil the pieces in fresh water until they are tender, but change the water frequently to destroy all vegetable taste and odor. Yellow

carrots can be used, but in that case the resulting confection will differ from preserved ginger in color, although not in taste.

To every pound of cooked carrots add two pounds of granulated sugar, one quart of water, two ounces of green ginger root shaved fine, and the juice and grated rind of one lemon. Boil the mixture for fifteen minutes, and repeat the boiling the next day, and surely once or twice more; at any rate, until the syrup is very thick. If the boiling was continuous for five hours, the moisture would be eliminated, but the texture of the "ginger" would probably be ruined. The short cookings give the carrots the opportunity to absorb the cooling syrup slowly. If less water were used,— in order to reduce the time of cooking,— the carrot would harden too rapidly to take up enough syrup.

If the "ginger" is not wanted for immediate use, it can be stored in the syrup. The confection may be finished at once and packed dry, but the better method of preservation is in the liquid. The open season for carrots is very short and for the "ginger" is the whole year long!

UNIV. OF CALIFORNIA

To finish, heat the syrup thoroughly and then drain. After the liquid has stopped dripping, roll each piece of the "ginger" in granulated sugar, place the pieces on a wire tray, making sure that no two pieces touch, and put the tray in an oven very slightly heated. When the confection is dry it is done.

Variations.— Three variations are possible. If a sharper taste is desired, add a few grains of Cayenne pepper the last time the syrup is boiled. If a moister product is preferred, omit the lemon-juice and rind. If green ginger cannot be obtained, substitute one ounce of ground ginger. Ground ginger, however, must be boiled in a fine cloth bag; otherwise particles of it will adhere to the pieces of carrot.

XIV

BEAN

Candied Green Beans.—Select well filled pods of green beans; wash, and then cook until tender in water to which a little soda has been added. Drain.

To a pound of beans so cooked, add one gill of water, one pound of sugar, and one tablespoonful of vinegar. Boil this mixture for fifteen minutes, and let it remain in the syrup over night. The next day, drain the syrup from the beans and cook it to two hundred and twenty degrees. Place the beans upon the screen of the crystal pan, pour the syrup over them, and cover with a board. Repeat the process next day.

When wanted for use, drain the syrup from the beans. Cook the syrup to two hundred and thirty degrees, return the beans to it, allowing them thoroughly to heat through. Turn them onto the screen, making sure that they are well spread.

Cover with a board, and, after a few hours, spread singly.

Bean Taffy.—Bean taffy easily takes first rank among all taffies — vegetable or otherwise. The taste is good beyond words, and the consistency is pleasingly "chewy" without being tenacious to the point of teeth pulling!

Lima beans are the best to use as the basis because the skins can easily be removed, but ordinary dried beans may be substituted if care is taken. Cover the beans with cold water, let them stand over night, and the next morning boil them until soft, and force through a fine sieve to remove all the skins.

Boil together two cupsful of granulated sugar, one-half cupful of water, a tablespoonful of butter, and one-half cupful of the beans, prepared as above. After the mixture has boiled thoroughly, add one cupful of milk. Add the cupful of milk, one-third at a time. Stir the mixture and let it boil a few minutes after each addition of milk. When the thermometer registers two hundred and forty-two degrees, pour the mass onto an oiled marble between

oiled candy bars so that it will set about one-quarter inch thick. As with ordinary taffy, cut into pieces of the desired size.

Nut Bean Taffy.—Cut Brazil nuts crosswise into shavings about one-sixteenth of an inch in thickness — about the thickness of the pieces of shaved cocoanut. Spread as many of them as are desired upon oiled marble between oiled candy bars. Pour over the nuts the mass described above. Treat as before.

XV

BEET

To the candy cook, the discovery that beets make good confectionery brings a new flavor and a new color — one as desirable as the other, and that is saying a great deal! In candy made from beets there are several new shades of red which previously could not be obtained even by the use of artificial coloring matter.

In case the beet color is desired for candies made upon other bases, it can be had very easily. The beets should be boiled until the water is colored red. Then this water may be substituted for the water called for by other receipts in vegetable candy-making. The beet color will be given but the beet flavor will not be. The result is a pleasing color without the use of anything that is artificial.

Frosted Beet Slice.— Boil to two hundred and thirty-two degrees two cupsful of sugar, one tablespoonful of grated raw beet,

one-third cupful of water, one teaspoonful of vinegar, and one teaspoonful of butter. Remove from the fire and stir in one-half cupful of broken walnut meats. When the mass begins to thicken, pour it between oiled candy bars on an oiled marble so that it will form a layer three-quarters of an inch thick. When cool, cover one-quarter of an inch thick with a frosting made of one cupful of sugar, one-quarter cupful of water, and one-eighth teaspoonful of cream of tartar, boiled without stirring to two hundred and thirty-four degrees and then flavored with a few drops of vanilla and lemon and beaten until creamy. When set,— a quick process — cut the mass into pieces about one-half inch wide and one and one-half inches long. If the confection is to be kept, crystallize at two hundred and twenty-five degrees. The looks are improved if the confection is then rolled in granulated sugar. Dry on a wire screen for twelve hours or so.

Note No. 10 in the frontispiece.

Beet Puffs.— Cut one medium sized beet into thin slices, cover with one-half cupful of cold water and cook in a double boiler

until soft. Drain, and to the liquid thus obtained add one pound of sugar; boil two or three minutes. To this mixture, add one-half cupful of the cooked beet cut into fine pieces. Cook this mass to two hundred and forty degrees. Have ready the whites of two eggs, salted and beaten to a stiff froth. Remove from the fire and after the steam has ceased to rise, beat the mixture into the whites of the two eggs. Using a pecan meat to push with, drop this mixture from a teaspoon in small puffs on waxed paper, leaving the pecan imbedded. This mixture is very foamy and adhesive, sets very quickly and must be handled rapidly. These directions will yield about five dozen puffs.

A few drops of rose water may be added if a more delicate flavor is desired.

Beet Cubes with Variations.— Beet cubes possess remarkable color value. To make them, boil to two hundred and thirty degrees two cupsful of granulated sugar, one tablespoonful grated raw beet, one-half cupful of water, one teaspoonful of butter and one cupful of shredded cocoanut. Pour the

mass between oiled candy bars upon greased marble so that it will form half an inch deep.

Four things may be done with this mass. It may be cut into cubes. If wanted for future use it may be dipped into a crystal syrup to hold the moisture. Children will like it poured into oiled cup-cake tins or any other mold. If molded, care should be taken that the finished confection is not more than half an inch thick. If the cubes are dipped into bon-bon cream they will be of unusual beauty because of the pink showing through the fondant casing.

Crystallized Beets.— Crystallized beets are fully as pretty as candied rose leaves. They are particularly valuable in trimming boxes of candy — especially "all vegetable" boxes.

To crystallize beets, use the process described for parsnips in Chapter XII. After the last crystallization, however, the pieces should be separated, dusted with granulated sugar, and dried on a wire screen, instead of being left on the rack.

If it is desired to increase the illusion, add rose water to the syrup.

Spiced Beets.— Boil beets and cut them into cubes of about one inch. Mix one cupful of sugar and one-third cupful of vinegar. Spice highly. Cinnamon, cloves and allspice should be used, and whatever else the fancy of the candy-maker dictates. Boil the mixture until it syrups, add the beets and cook ten minutes. Remove the mass from the fire, cover and set away for two days. Drain the syrup from the beets, boil the syrup to two hundred and twenty degrees and pour it boiling over the beets. Cover the mass and set it aside. Repeat this process on several successive days.

Spiced Beet Bon-bons.— Take spiced beets and drain off the syrup. Cook the syrup to two hundred and thirty degrees. With a wooden paddle beat it at one side of the saucepan until it begins to look creamy. Thereupon, add the beets, stir the whole mass briskly and turn it onto a sieve. Dry the cubes on a rack, roll each in fondant, dry for two hours and dip in bon-bon cream.

XVI

TOMATO

Tomato Marshmallow. — Very often marshmallows — even the sort sold in candy stores of the better class — contain gums and glucose which the amateur would find difficult to handle even if she felt no scruple in their use. Tomato marshmallows, however, are pleasing in consistency and more attractive in flavor than the old-fashioned kind. Moreover, they are easy to make, although it is necessary to give more detailed directions than would be required in the description of the process with which the home candy-maker is more familiar.

Dissolve three tablespoonsful of granulated gelatine in one cupful of hot water. Cook and strain ripe tomatoes; to one-half cupful of the strained tomato add one cupful of sugar and cook the mixture to two hundred and thirty degrees. Have ready in a deep saucepan, three cupsful of sugar,

moistened with one-quarter of a cupful of water. Upon it strain the tomato syrup, stir well, thin with a cupful of water, and cook to two hundred and forty degrees. Set the mass off the fire, add the gelatine water previously prepared, mix thoroughly and strain into a fresh bowl. Have ready the whites of two eggs beaten to a stiff froth. With a French egg whip or a common wooden paddle, beat the cooked mass hard until it is white and does not separate. When it becomes foamy and spongy, gradually add the beaten egg whites and keep beating until the whole mass is very stringy and will almost set on the paddle. Sift upon the mass one tablespoonful of corn starch; stir well. Pour the candy between candy bars on a marble well dusted with XXXX sugar. Leave ten or twelve hours, cut into squares, roll well in XXXX sugar, spread the other side up and dry off. Instead of pouring the marshmallows between candy bars, they may be molded in corn starch. Store in a tight box.

The receipt sounds more laborious than is the process. The repeated boilings are

necessary to perfect the product. The acid of the tomato destroys the granularity of the sugar. Straining the mixture eliminates the particles of tomato which, not having blended thoroughly into the syrup, would cause trouble by sticking to the bottom of the saucepan in the later higher cooking.

Chocolate Marshmallow.—Marshmallows, made as directed above, are the basis for them. Dip them in coating chocolate; the method of treatment is the same as with ordinary chocolate marshmallows.

Vegetable Nougatine.—Mix two cupsful of sugar, one-third of a cupful of corn syrup, one-third of a cupful of strained honey, and one-third of a cupful of strained cooked tomato; boil the mixture to two hundred and sixty degrees. Beat three egg whites very stiff, and remove the mixture from the fire. Until about one-half of a cupful has been so used, dip a spoonful at a time on the eggs, beating the mass continuously. From this point on, use an asbestos mat under the pan. Return the remainder to the stove. This time cook the mass to two hundred and ninety degrees.

Pour it over the eggs, again beating continuously. Thereupon, set the mixture on the stove once more. The mass should cook slowly until, when tried in water, a sample of it has the consistency that is desired in the finished candy. Some people like the vegetable nougatine soft, others like it "chewy," and still others want it to be hard. Stir in one-half of a cupful of almonds, blanched and cut into small pieces, and one-half of a cupful of garden "ginger" also cut into small pieces.

Line a shallow straight-sided pan with wafer paper. Pour in the candy, and press a sheet of wafer paper onto the top. Let the mixture stand over night. The next morning remove the candy, paper and all, from the pan and place it on a marble slab, slightly oiled. With a long, thin knife, cut it into strips one and one-half inches long, and three-eighths of an inch thick and deep. Do not attempt to cut directly through the candy, but use a sawing motion. Immediately wrap the pieces in parchment paper.

Wafer paper, be it noted, is made from

rice. It is easily soluble in water and may be eaten with impunity.

Chocolate Nougatines.—If the nougatines are desired for chocolate coating, the process is very simple. Instead of pouring the mass into the pan, lined with wafer paper, it should be poured onto a greased marble, between greased candy bars, so placed that the mixture will completely fill the rectangle formed by the bars. As before, cover with wafer paper. Over the paper place a board, kept in place with a heavy weight, in order to make the mixture more solid. As before, cut into small pieces. The process of coating is the ordinary one.

Nut Burs.—Cook one-half of a cupful of strained tomato and one cupful of granulated sugar to two hundred and thirty degrees; add two cupsful of sugar, one-half of a cupful of water, and two teaspoonsful of butter. Let this mixture boil up once only; then strain. Place it in a three quart saucepan, return it to the fire, and cook to two hundred and forty-two degrees.

Take one-quarter of a cupful each of

preserved garden "ginger" and spiced beet, drain the syrup off and cut very fine; spread upon a wet marble.

Over beet and "ginger" pour the cooked mixture, and "cut in." Form the mass into balls, flatten them slightly, roll in confectioner's sugar, and let dry.

With a sharp knife, cut on a board blanched almonds, pecan, and pistachio nut meats into small, pointed pieces.

This is the method of using the nuts: Have the nuts spread thinly upon a plate. Melt coating chocolate, and let it stand until cool. The principles laid down in Chapter VI, "Chocolate Coating," should be followed. Into the chocolate dip the dried balls and roll them over the nuts. Make sure that the nuts adhere to all parts. Dry upon racks.

The brown, green and cream of the almonds, pecans and pistachios against the dark chocolate background make a very attractive color scheme. The nuts may be used alone, however, or different combinations may be substituted. Other nuts may be drafted into effective service. If peanuts are used, be it noted, they must not be

combined with any other nuts; the peanut flavor is overwhelming.

See the dish at the right of the illustration facing page 118, and No. 21 of the frontispiece.

XVII

CORNLETTES

Green corn has great possibilities for the maker of vegetable candy. If fresh corn can be obtained, boil the ears in salted water until the kernels are tender. While they are still hot, with a thin, sharp knife cut down the center of each row. Press with the back of the knife down the cob thus freeing the pulp but leaving the skin upon the cob. To make certain that the pulp is free from skins, and of a uniform consistency, force it through a coarse sieve. Note that the corn is not to be made into a paste as was the potato. If canned corn is used, force it through a sieve.

Boil together, until the mixture is very thick, one-half cupful of corn, so prepared, one-half cupful of granulated sugar and one-half cupful of coffee A sugar. The thermometer reading will be about two hundred and thirty degrees. Add one-half

cupful of bon-bon cream. Pour the mixture into a rubber mold, or, if preferred, drop like cream wafers upon waxed paper. If the mass is too thick to pour easily, add a few drops of hot water. The quantities here given will fill a mold of four-dozen size — the sort illustrated on page 10. After the drops have dried for five or six hours, dip them singly into a syrup cooked to two hundred and twenty-five degrees. On the next day they will be ready for packing.

Nut Cornlettes.—Cornlettes are a little richer both in consistency and in flavor than the many creams to which candy eaters are accustomed. By the addition of a nut to each piece, however, cornlettes may be made still richer and still more distinctive candy.

There are three methods of adding nuts. The first method is to push the nut into each piece soon after it has been poured into the mold. The great advantage of this method is its ease and quickness. The confection is ready for the serving dish as soon as it is cool enough to leave the mold. A clearer and better finished ap-

Decorative and Edible

pearance may be obtained by the use of the second method. By it, the cornlette, when molded, is dipped into a crystal syrup. A drop of the hot crystal is placed upon the back of the nut meat to serve as glue, and corn and nut are pressed together. When cool, the whole is dipped into the crystal. The third process is a compromise. The drop may be dipped into the crystal as soon as it comes from the mold, and the nut, either plain or dipped, may then be placed upon it. When the crystal sets, the union will be firm.

XVIII

ONION COLD TABLETS

By supplying a more wholesome sort of confectionery, vegetable candy—at least in the eyes of its friends!—has decreased the need of household remedies for indigestion and similar ailments. On the other hand, the newly discovered candy-making brings a definite contribution to the family medicine chest. From onion can be made tablets that have the virtues assigned to our foremothers' cough syrups and even are good to eat, according to those who like the flavor of the onion.

Onion cold tablets, then, are offered both as confectionery and as a household remedy. It should be borne in mind, however, that no household remedy, however good, or tried, takes the place of the physician. The family health is too precious a commodity to be entrusted to unprofessional hands.

To make the tablets, cut into thin slices

two ounces of raw onion — about half of a good sized onion,—work the onion into two cupsful of sugar and let the mixture stand for two hours. Add two-thirds of a cupful of cold water, place the mass on the fire, and let it come just to a boil. Strain the syrup so made into a granite sauce-pan, and add one teaspoonful of vinegar and the amount of red pepper that the point of a knife will hold. Place the mixture on the fire, and when the mass begins to boil, put a wooden cover over the pan. Continue the boiling for several minutes; thoroughly "steam down" the side of the pan. By "steaming down" the side of the pan is meant confining the steam which rises from cooking so that it will free the sides of the pan from the accumulation of the mass that is cooking.

Remove the cover, insert a thermometer, and cook the mass to three hundred and thirty-five degrees. Thereupon stir in one tablespoonful of butter, remove the mass from the fire, add one teaspoonful of salt, and baking soda the size of a large pea. Thoroughly mix the mass, and pour it between candy-bars on a well oiled marble

slab. As the confection sets, mark it off in squares, and be sure to run the knife under the whole sheet to free it from the marble. Unless the sheet is so freed from the marble it will be sure to stick so that it can be handled only with difficulty. When the mass is cooled, it will easily break into the squares into which it has been marked. For preserving, pack the tablets in tin boxes.

For those who do not like so much red pepper, the quantity may be regulated to suit. The amount of onion used may also be increased or diminished as the taste of the candy-maker dictates.

XIX

ORIENTAL PASTE

This confection is easily made from purely vegetable ingredients, and has the pleasing consistency and flavor of the Turkish pastes. The gelatine that is used comes from an aquatic plant — instead of from the usual source. It can now be obtained in specialty stores and in some of the grocery stores of the larger cities.

Cut one-half of an ounce of Japanese gelatine into fine pieces, and pour over it two cupsful of warm water. Ordinary gelatine can not be substituted. Let it stand for at least two hours. The results will be much better if the soaking is allowed to take a whole night. Set this gelatine water on the fire and stir it until it comes to a boil and the gelatine is wholly dissolved.

Mix one pound of sugar and one-half of a pound of glucose; into them strain the gelatine. Set the resulting mixture on the fire and cook it until it is very stringy as

it drops from the paddle. When stirring, scrape the bottom of the kettle well as the mixture sticks very easily.

Run a half pound of figs through a grinder. When the gelatine mass is cooked, as above, remove it from the fire, add a few drops of oil of lemon or a teaspoonful of lemon extract, and thoroughly mix in the figs. Dust a marble slab with confectioner's sugar, place candy bars in position, and pour the mass between them so as to form about one-half inch thick. If the candy is allowed to cool a little before it is poured out, and is carefully stirred, the figs will not separate and come to the top. Dust the top with the sugar and let it remain over night.

To finish the confection, cut it into squares by simply pressing the knife down through it. Roll the pieces in confectioner's sugar, and pack them in an air-tight box.

Seaweed.—This gelatine called for by this receipt is also known as Japanese isinglass, agar-agar, and kanten. It is peculiar to Japan. It is made from seaweed, the great unused resource of the western

world. The Orient alone to any extent uses seaweed as a food, and, of the Orient, only Japan shows appreciation of its agricultural and commercial value. Kanten is the product of five hundred manufacturing plants in Japan, with an annual output of over three million pounds. The usual commercial gelatine is made from animal tissues — skin, ligaments, tendons, or the matrix of bones, particularly of horns and hoofs. Seaweed as a source for gelatine appeals somewhat more to the imagination!

Kanten is made from the gelidium family of seaweed which grows in deep water upon the rocks. Coolies dive for the seaweed. They wash and dry it by the seaside, and sell it at seven or eight cents a pound to the factories for gelatine manufacture. The perfect purity of kanten is proved by its use as a culture medium in bacteriological work.

Gelidium grows on both coasts of America from Canada to the Gulf. This is true, also, of red laver which is largely used as a food in Japan and unknown here. In Japan it is baked or toasted until crisp

and used in sauces and soups. It is palatable, and nutritious, being rich in proteids. Red laver is not abundant in Japan and is being cultivated. Sea farming is becoming an important industry under the supervision of the government. The red laver beds are now rented out by the season to the sea farmers with average crop returns of one hundred and fifty dollars per acre.

Kelp, also, is utilized in Japan, not alone for glue, sizing and iodine, but as a food — kombu. In this country, it is sometimes used to fertilize the low-lying, barren lands near the shore.

In the marketing of the vegetable sea food known as Irish moss, New England comes to the fore. This is a delicious food product used much as corn starch for blancmange, jellies, custards, and puddings.

In a book relating to candy-making, why this information concerning the unappreciated food value of seaweed? Because the discovery of the possibilities that cheap and common vegetables can well serve as the basis for the best candy may well be supplemented by the utilization of seaweeds, valuable as a food, but now wasted.

In the midst of her work, the candy-cook may well stop to think that it is by putting cheap and common things to new uses that the race will make material progress.

XX

STUFFED FRUITS

Dates for Candy.—For the basis of dates as candies, Fard dates are perhaps the best because they are generally whole with unbroken skins. If Persian dates are to be used instead, they should be of the sort that come packed in single layers or in small boxes. The skins of Persian dates are tender and when taken from boxes holding fifteen or twenty pounds are torn by the sharp pick used to handle them. When cream fillings are used, however, softer dates can be substituted if they are carefully handled.

Sparkling Dates.—Wash, steam, pit, and dry. Fill them with rhubarb marmalade, and close them very tightly. Brush the whole outside surface with the unbeaten white of an egg, and roll the dates so coated in coarse granulated sugar. If Fard dates cannot be obtained, select as perfect Persian dates as possible. Fill them with rhubarb

marmalade as for the Fard dates, but do not use the egg coating. Simply roll in the sugar.

Chocolate Covered Dates.— Proceed as above up to the point at which the dates are rolled in sugar. To make the chocolate confection, roll the dates in confectioner's sugar, instead of in the coarse granulated. After they have dried, coat them as usual with chocolate.

Date Brilliants.—Wash, steam, and pit dates; fill them with either vegetable cream or cream fondant. Dip them singly in a crystal syrup, cooked to two hundred and twenty-five degrees. Dry them on a rack. For fillings, a great variety is possible. Add finely chopped nuts or granulated cocoanut to the vegetable cream, or use rhubarb marmalade, tart jam, or orange marmalade.

Rhubarb Marmalade.—The fillings suggested for date brilliants are all within the knowledge of the candy-cook, except, perhaps, rhubarb marmalade. As the basis for it, wipe clean with a damp cloth stalks of rhubarb. They must not be put into water. Peel them and cut them into very thin

slices. Cover each pound of rhubarb with one and one-quarter pounds of granulated sugar. Let the mixture stand over night. In the morning, boil it for ten minutes, or a little longer if the rhubarb is not soft. Grind one-third of a pound of dried figs; remove the rhubarb and sugar from the fire; to them add the figs and stir until they are thoroughly mixed. Boil ten minutes more. The marmalade should be put into glasses while hot, and sealed at once.

Sugared Dates.—Prepare dates and fill as for date brilliants; dip them in syrup, and, while still damp, dust with granulated sugar.

Stuffed Dates.—Fill with any cream or marmalade and roll in granulated sugar, dates washed, strained, steamed and pitted.

Stuffed Prunes.—The sort of prunes that come in boxes are better to use than the ordinary ones because they are of a better quality, and are separated in the curing. Barely cover the prunes with cold water, and allow them to stand over night. One method is to pour the water off the next morning, pit the prunes, and use them as they are. If the prunes are moist and firm

to begin with, the soaking is probably all that is necessary. Otherwise the second method is the one to be followed. If so, after the prunes have been soaked, place them over the fire and allow them to come to a boil quickly. This application of heat is sure to plump out prunes that have become dry, or have been overcured. The difficulty, however, is that there is danger that the juice will be started, and much of it lost, and that the skins may be broken. The second method will destroy the raw taste to which some persons object.

No matter which method has been followed, fill each prune with tart jam, orange marmalade, rhubarb marmalade, or with potato fondant, cooked or uncooked, with or without the addition of nuts. To finish, coat each prune with the unbeaten white of an egg, and roll in granulated sugar. If it is desired, they can be rolled in confectioner's sugar, dried and coated with chocolate.

XXI

ANGELIQUE

Rings.—Angelique is a vegetable that is of the greatest use as an accessory in the making of many sorts of vegetable candy. That fact, however, should not obscure the equally important fact that its flavor is excellent and that it may well be used as a base. Rings made from it are very good if filled with any one of the four mixtures described below. And, as the reader will see by looking at No. 15 of the frontispiece, they are good to look upon.

As a beginning, no matter what filling is to be chosen, cut crystallized angelique cross-wise into sections a quarter of an inch wide. If these sections are flattened by packing or cutting, separate the sides so that they form circles, the more nearly perfect the better.

The fillings may be either potato fondant, plain or colored, and flavored to taste; potato fondant with chopped nuts worked into

Flowering Summer (½)

Angelica Archangelica

it; equal parts of potato fondant and almond paste; or rhubarb marmalade, with confectioner's sugar worked into it if it appears too moist.

When the fillings are in place, each ring should be dipped separately into a crystal, cooked to two hundred and twenty degrees, and then should be allowed to drain on a wire rack. The next day the process should be repeated. When the rings have become thoroughly dry, they will be found very useful for almost any sort of serving or packing. The outside is firm, and the centers soft.

Orange Rings.—Rings made from candied orange peel may be treated similarly. Cut the peel into rings by using one-half and one quarter inch cutters. Thereafter both process and fillings are the same. An interesting combination can be made by arranging three small orange rings in a cluster, and holding them in position by the syrup. In addition to the filling, a pignolia nut may be placed in each ring.

See No. 19 of the frontispiece.

Angelique as a Plant.—Angelique or angelica is so called because in early centu-

ries it was thought to be a specific for poison and pestilence. It is an aromatic garden herb, of an order of plants of the cohort umbelliferae, known popularly as the parsley family. The order is one of strongly marked properties. Some of its members contain an aromatic oil and furnish condiments — as anise, dill, caraway, and coriander. From another group these qualities are nearly absent and the stem and leaf are edible — as in celery, angelique and parsley; or the root — as in carrot and parsnip.

Angelique is native to many temperate parts of Europe and America. It grows on river banks and in other damp places. It is easily cultivated and often grows to the height of six feet. Its seeds may be sown in the autumn as soon as they are ripe, or they may be planted in the spring. Angelique develops a plant much like celery. It is blanched and eaten the same way. The stalk is used commercially when crystallized or candied. It is green in color and pleasingly pungent in flavor, and lends itself in many ways to the use of the candy-maker. It comes generally in strips six or seven

inches long and is cut according to the special directions for the different candies.

Angelique is so easy to raise and is of such value that two methods of handling it when home grown are given below. Why so many candy-makers with gardens continue to buy it when it can be cultivated so easily is a mystery.

Preserved Green Angelique.—Select angelique that is fresh, young, crisp, and as tender as possible. Cut the stalks into six inch lengths; wash them thoroughly. Boil them in water for ten minutes, and drain them. Thereupon, boil them in a syrup for half an hour. Let them cool in the syrup. Store in wide-mouthed bottles or jars.

Dried Angelique.—Prepare the angelique as before. Cut the stalks into strips, lozenges, or large and small rings. Boil them in the syrup three or four times — as was directed before. After draining, roll each piece in powdered sugar. Dry them thoroughly on a screen, and store carefully.

XXII

FOR THE CATERER

Vegetable candy opens up a new field for the caterer. It furnishes him material that is not only cheaper but better than that with which he has been accustomed to work. Not only are the results better, but they are achieved by the expenditure of much less effort. Potato fondant can be made to assume clear outlines without the hour after hour beating required by the traditional French methods. Moreover, the caterer's customers can have the satisfaction of knowing that the pretty things that they are buying are not made with the help of plaster of Paris or other ingredients of which the less there is said the better!

The caterer should take particular note of the illustration facing page 138. It will suggest many of the uses to which the new mediums can be put. The caterer, also, should read with particular care the chapter relating to decorative candy. Chap-

ter and illustration together will furnish him with ideas as to how he can make use of this discovery in his own profession. Of course, for success, absolute familiarity with the processes of vegetable candy-making is essential.

There are a few definite points which should be borne in mind, however, by the person who wishes to use vegetable candy in catering. Flowers can be wired and used as bouquets. As will be seen from the illustration facing the next page, to hold candles for use on birthday cakes there is no need to use the objectionable wire cups. Smaller flower cups made from potato fondant can be substituted. An excellent method is to use them in the border. There, they are not only useful but highly decorative. Nor need there be used cups made from starch, plaster of Paris, or other inedible mixtures.

The possibilities of using potato fondant as the base for fancy cups to hold ice creams and ices are unlimited. For instance, the fondant can be molded into cups of conventionalized flower designs. The caterer should remember that these cups

should be dipped one or more times in a crystal syrup. This will not only make them resemble somewhat the ever popular spun sugar, but will tend to make them impervious to the melting ices or creams. As a result, the fondant itself will retain its crispness. A similar use is for novel containers for salted almonds and nut meats.

One great advantage of the use of objects made from vegetable candy is that they may very easily be made to follow the color schemes used at luncheons or dinners. The color may be very easily applied to the exterior or may be worked into the mass itself before it is molded. Just how these operations should be followed will readily be seen by re-reading Chapter VIII, division III,

"DECORATIVE CANDIES FROM POTATO FONDANT."

For instance, if pink is the color for the luncheon, wild roses easily suggest themselves as promising decorations. The form of the wild rose lends itself readily to cups, — the larger ones for ices and the smaller for nuts. If the function is a birthday, wild

For the Caterer

roses may well be used for candle cups on cakes. If not a birthday, and decorative icing is desired for large or small cakes, nothing could be prettier than the roses. They can be used either as a border of conventional regularity around a large cake or in the center of small, round cakes covered with white icing. As a flower decoration, candy wild roses can be placed in a vase in the middle of the table. To carry the place cards, there may be a butterfly alighting upon each rose cup holding nuts. These butterflies can be made of vegetable candy, water color paper, or bolting cloth; whatever their material, they must be wired, or glued, with a few drops of crystal syrup, to the edge of the rose.

If, however, the luncheon is to be violet, other decorations can be used. The center piece may be a large bunch of popcorn violets. At each plate there may be French baskets, made from potato fondant colored pale violet, filled with cocoanut violets. To give the idea that the baskets have just come from the florist's, to each there may well be tied a card bearing the name of the guest. In this instance, it

would be well for the ice to be served in a fondant basket and capped with a few violets.

The caterer will readily see that vegetable candy offers itself in countless ways in connection with place cards. The new candy can not only be used as the holder for daintily designed cards, but the design itself may be painted directly upon the object modeled from potato fondant or potato paste. The first method is likely to be rather more easy in its process and attractive in its results, on the whole, but the second has the distinction of novelty. It surely is an interesting thing for the guests to be able to eat their place cards, decoration, design, and all!

For Easter, yellow is a particularly good color. For ices, cups and cases can be made of white and yellow fondant modeled in the form of jonquils or daffodils. Carrot rings, served with the salad course, would add a touch of variety. As is suggested in the chapter concerning decorative candies, potato fondant can be made to serve the table decorator especially well for special times and functions. Insignia can eas-

ily be formed of fondant, either as separate forms to be wired and used as place cards or as place cards attached to the little cases — paper or fondant. A Masonic dinner, for instance, would use the square and compass in different ways, and one for the Odd Fellows would make use of their three links. For college banquets, the appropriate Greek letter insignia could be used. In this case, however, the caterer must make sure that he is not violating any of the rules of the societies to which his guests belong.

For any decoration that is flat instead of modeled, the potato paste can be substituted for the potato fondant. Thus, in the case last cited above, many of the insignia can be cut from paste more easily than they can be modeled from fondant. A tinsmith can easily make a cutter that will save time if a number of the same design are desired.

The paste can be used with the fondant, either in the same object or separately for the same occasion.

Vegetable candy can be made by the skillful amateur as readily as by the manufacturer. No large plant or complicated

machinery is required. As a result, the girl or woman with a skill that is great, but a bank account that is small, may find vegetable candy the road to a profitable catering trade. If in a small town, she can — if she is sufficiently skillful — fashion decorations for food that will rival the products of the art of the city caterer. Moreover, inasmuch as she is put to comparatively little expense, and is using comparatively cheap ingredients, she can undersell her urban competitor. And her fellow townswomen who buy her wares will have the distinct satisfaction of knowing that her product is free from harmful ingredients.

XXIII

FOR THE TEACHER

The discovery of vegetable candy has been of great pedagogic value. Teachers of household arts and all art are beginning to find that the new bases are of great service to them in their class work. Before this discovery, there was no medium which was of use for both cooking and the modeling classes. Now cooking classes and modeling classes can be correlated in such a way that much is promised both.

The processes in the making of potato fondant and potato paste illustrate fundamental principles in domestic science. With the exercise of a little care on the part of the teacher, their making can be as simple and educationally valuable as the traditional first lesson in peppermint drops. In the fashioning of these new candies, however, there is more incentive to the child than there was in the cooking of the old-fashioned confection, no matter how de-

lectable it might be. But the pedagogic value of vegetable candy does not fall wholly within the field of household arts. As has been explained in the chapter concerning decorative candy, potato fondant and paste are the basis of very attractive objects. Their fashioning, obviously, can be made to teach principles of line, design and color. Is it not safe to say that no other modeling medium — edible or inedible — possesses this threefold recommendation? Fondant or paste can be colored by painting directly upon the finished surfaces, or the coloring matter can be worked into the mass. In either case, there is a pleasing relief from the gray or green of clay and its preparations. Now the child can model in natural colors what he sees on his nature study rambles. Now he can make roses in their natural colorings and shadings, and buds that are not wholly a dull, dead green! Moreover, potato fondant can be modeled so as to have clearer outlines than clay. There are two disadvantages, however, which should be stated: first, potato fondant must be handled with moderate quickness in order to give the best

results, and, second, it is so good that there is danger that the pupil will prematurely eat his lesson!

Because the finished product is good to eat as well as to look upon, potato fondant as a modeling medium adds to the teacher's resources another incentive for the child. In work with defective children, it has been found, again and again, that the more senses to which appeal can be made, the better. Do not the same principles apply to the normal child, although with somewhat lessened force? In art work with vegetable candy, sight and touch are not the only senses in operation; taste and smell are in full play.

Often, teachers of both art and household arts are perplexed when it comes time for the annual schood exhibition. "What can we do," they ask, "that will be properly illustrative of our work and, at the same time, of appeal to the popular imagination?" It is hoped that vegetable candy offers an answer to this question. Its novelty and hygienic value are such that parents of the children are interested in it. Moreover, the unusual interest of the chil-

dren themselves has been known to react upon the parents.

Suggestions for the details of working out the school use of vegetable candy will be found in the pages which precede. The teachers should read with particular care the chapter which refers to decorative candy, and particularly the division relating to modeling. They will find many hints as to how it can be successfully applied to their own school work.

THE END

INDEX

INDEX

Abel, Mrs. Mary H., on value of sugar in diet, 48.
Accuracy, necessity for, 3.
Almonds, Celtic, 86.
Angelique, dried, 135; preserved green, 135; plant, 133; rings, 132.
Apples, red, as decorative candies, 70.

Bars, for forming masses, 14-15.
Bars, chocolate, 87.
"Ball," "hard," 19, 22; "soft," 19, 22.
Bean, 102-104; bean taffy, 103; candied green beans, 102; nut bean taffy, 104; pulled taffy, 104.
Beet, 105-109; beet cubes, 107; beet puffs, 106; crystallized beets, 108; frosted beet slice, 105; spiced beets, 109; spiced beet bon bons, 109.
Boiler, use of double, 24, 25.
Bon bons, spiced beet, 109.
Bon bon dipper, 8.
Boutonnieres, parsnip, 95-96; violet, 59-60.
Brilliants, date, 129; date, with rhubarb marmalade, 130.
Burs, nut, 114.

Calla lily, as decorative candy, 69.
Caramel, opera, 83; potato, 80-83.
Carrot, 97-101; crystallized, 98; garden "ginger," 99; rings, 97; rolls, 98.
Caterer, the, 136-142; coloring for, 138; cups, 137; decorations, 139, 140; flowers, 137; potato fondant for, 136.
Celtic almonds, 86.
Chocolate, bars, 87; coating, 36-40; covered dates, 129; in crystallization, 27; marshmallow, 112; nougatines, 114; peppermints, 86.
Child, the, craving for sweets of, vii, viii; sugar for, viii, 47-51; Mrs. Mary Hinman Abel on, 48.

Cleanliness, necessity for, 4.
Climatic conditions, in candy making, 4; in chocolate coating, 35, 36.
Cocoanut violets, 58.
Cold tablets, onion, 120.
Cornlettes, 117; nut, 118.
Corn starch, for drying, 18.
"Crack," 19, 22.
Creams, pecan, 85; raisin, 85; vegetable, 88.
Crystallization, 27-32; beets, 108; chocolate in, 27; crystal syrup, 28, 29; French hand, 30; basis for parsnip candy, 93; sugar, 28.
Crystallized beets, 108.
Crystal syrup, 28, 29.

Dates, candy, 128; chocolate covered, 129; date brilliants, 129; rhubarb marmalade for, 130; sparkling dates, 128; stuffed dates, 130; sugared, 130.
Decorative candies, 52-79; from potato paste, 52-57; green leaves, 56; potato paste, 53; violets, 57-61; cocoanut violets, 58; popcorn violets, 57; violet boutonnieres, 59, 60; from potato fondant, 61-79; calla lily, 69; coloring for, 64-66; cooked potato fondant, 62; daisy, white, 66; daisy, yellow, 69; grapes, 77; modeled candy, 62; new potato, 75; parsnip boutonniere, 95; pea pod, 76; red apples, 70; rose buds, 74; single rose, 72; snow balls, 76; uncooked potato fondant, 61; white daisy, 66; yellow daisy, 69.
Degrees, on candy thermometer, 22.
Dishes, white enamel best, 12.
Dipper, bon bon, 8.
Double boiler, use of, 24, 25.
Dropping funnel, 11.

Fondant, potato, decorative candies from, 61-79; calla lily, 69; coloring for, 64-66; cooked potato fondant, 62; daisy, white, 66; daisy, yellow, 69; grapes, 77; modeled candy, 62; new potato, 75; parsnip boutonniere, 95; pea pod, 76; red apples, 70; rose buds, 74; single rose, 72; snow balls,

Fondant.—Continued.
76; uncooked potato fondant, 61; white daisy, 66; yellow daisy, 69.
Frosted beet slice, 105.
Funnel, dropping, 11.
Fruits, stuffed, 128-131; dates, 128; dates, chocolate covered, 129; date brilliants, 129; rhubarb marmalade for, 129; dates, stuffed, 130; dates, sugared, 130; stuffed prunes, 130.

Garden "ginger," 99.
Gelidium, 125.
"Ginger," garden, 99.
Glucose, 46.
Grapes, in decorative candy, 77.
Green leaves, in decorative candy, 56.

"Hard ball," 19, 22.
"Hard crack," 19, 22.
Hook, taffy, 13.

Irish moss, 126.

Kanten, 125.
Kelp, 126.
Knife, special, 12, 13; for cutting in, 14; palette, 55.
Knots, sweet potato, 91.

Marshmallow, chocolate, 112; tomato, 110.
Mat, rubber, 9.
Mocha walnuts, 84.
Modeled candy, 62-64.
Modeling stick, 16.
Moss, Irish, 126.

Netting, wire, used in draining fruits, 5, 17.
Nougatines, chocolate, 114; vegetable, 112.
Novice, help for the, 3-7.
Nut burs, 114.
Nut cornlettes, 118.

Onion cold tablets, 120.
Orange rings, 133.
Oriental paste, 123.

Packing, of candies, 6.
Parsnip, 93-96; boutonnieres, 95-96; candied, 93-95.
Paste, oriental, 123; potato, 52; potato, use by teachers, 143.
Pastilles, sweet potato, 92.
Patties, sweet potato, 90.
Pea pods, in decorative candies, 76.
Pecan creams, 85.
Peppermint chocolates, 86.
Popcorn violets, 57.
Potato, new, in decorative candy, 75; caramels, 80-83; celtic almonds, 86; chocolate bars, 87; mocha walnuts, 84; pecan creams, 85; peppermint chocolates, 86; raisin creams, 85; sweet potato, 90-92; knots, 91; pastilles, 92; patties, 90.
Potato fondant, decorative candies from, 61-79; cooked, 62; uncooked, 61; modeled candy from, 62; coloring for, 64-66; calla lily, 69; daisy, white, 66; daisy, yellow, 69; grapes, 77; modeled candy 62; new potato, 75; parsnip boutonniere, 95; pea pod, 76; red apples, 70; rose buds, 74; single rose, 72; snow balls, 76; white daisy, 66; yellow daisy, 69.
Potato paste, 52.
Prunes, stuffed, 130.
Pulling taffy, 6, 7.

Racks, for drying, 17.
Raisin creams, 85.
Red apples, in decorative candy, 70.
Rings, angelique, 132; carrot, 97; orange, 133.
Rose, buds, as decorative candy, 74; single, as decorative candy, 72.

Scale, thermometer, 22.
Screens, 17.

Sea weed, as food, 124; gelidium, 125; Irish moss, 126; kanten, 125; kelp, 126.
Snow balls, in decorative candy, 76.
Soapstone, used as working slab, 5.
Sparkling dates, 128.
Spiced beets, 109.
Spiced beet bon bons, 109.
Steam, candy making, 24-26; double boiler, use of, 24, 25; steaming, 24; steam bath, 25.
Stuffed fruits, 128-131; dates, 128; dates, chocolate covered, 129; date brilliants, 129: rhubarb marmalade for, 129; dates, stuffed, 130; dates, sugared, 130; stuffed prunes, 130.
Sugar 41-51; for children, 47-51; for crystallization, 28; glucose, 46; rolling candies in, 5, 6; value of, 41-43; varieties of, 44.
Sugared dates, 130.
Sweet potato, knots, 91; pastilles, 92; patties, 90.
Sweets, necessity of, i, ii, viii.

Tablets, onion cold, 120.
Taffy, bean, 103; nut bean, 104; pulling, 6, 7.
Taffy hook, 13.
Teacher, the, 143-146; potato paste or fondant as medium for, 144.
Thermometer, 19-23; scales, 22; "crack," 19, 22; "hard ball," 19, 22; "hard crack," 19, 22; "soft ball," 19, 22; "thread," 19, 22.
"Thread," 19, 22.
Tomato, 110-116; chocolate marshmallow, 112; chocolate nougatine, 114; nut burs, 114; tomato marshmallow, 110; vegetable nougatine, 112.

Utensils, bars, forming, 14, 15; bonbon dippers, 8; dropping funnel, 11; knife, for cutting in, 14; knife, palette, 55; knife, special, 12, 13; modeling stick, 17; rubber mat, 9; screens, 17; taffy hook, 13; wooden spoon and paddle, 12.

Vegetable candy, keeping quality of, ii; modeling medium, iv; sociological value of, iv.

Vegetable creams, 88.
Vegetable nougatines, 112.
Violets, 57-61; boutonnieres, 59, 60; cocoanut, 58; popcorn, 57.

Walnuts, mocha, 84.
Weather, influence on candy making, 4, 35.
White daisy, as decorative candy, 66.
Working slab, soapstone used as, 5.
Wooden utensils, spoon and paddle, 12.

Yellow daisy, as decorative candy, 66.

THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

AN INITIAL FINE OF 25 CENTS
WILL BE ASSESSED FOR FAILURE TO RETURN THIS BOOK ON THE DATE DUE. THE PENALTY WILL INCREASE TO 50 CENTS ON THE FOURTH DAY AND TO $1.00 ON THE SEVENTH DAY OVERDUE.

SEP 29 1944

23Feb'57PT

REC'D LD

FEB 9 1957

6 Jul'59 MR

REC'D LD

JUL 6 1959

JUN 22 1970

REC'D LD JUN 9 70 -8 PM

REC'D LD JUN 8 70 -9 PM

LD 21-100m-12,'43 (8796s)

332

YB 67822

335791
TX791
Hall H2
UNIVERSITY OF CALIFORNIA LIBRARY